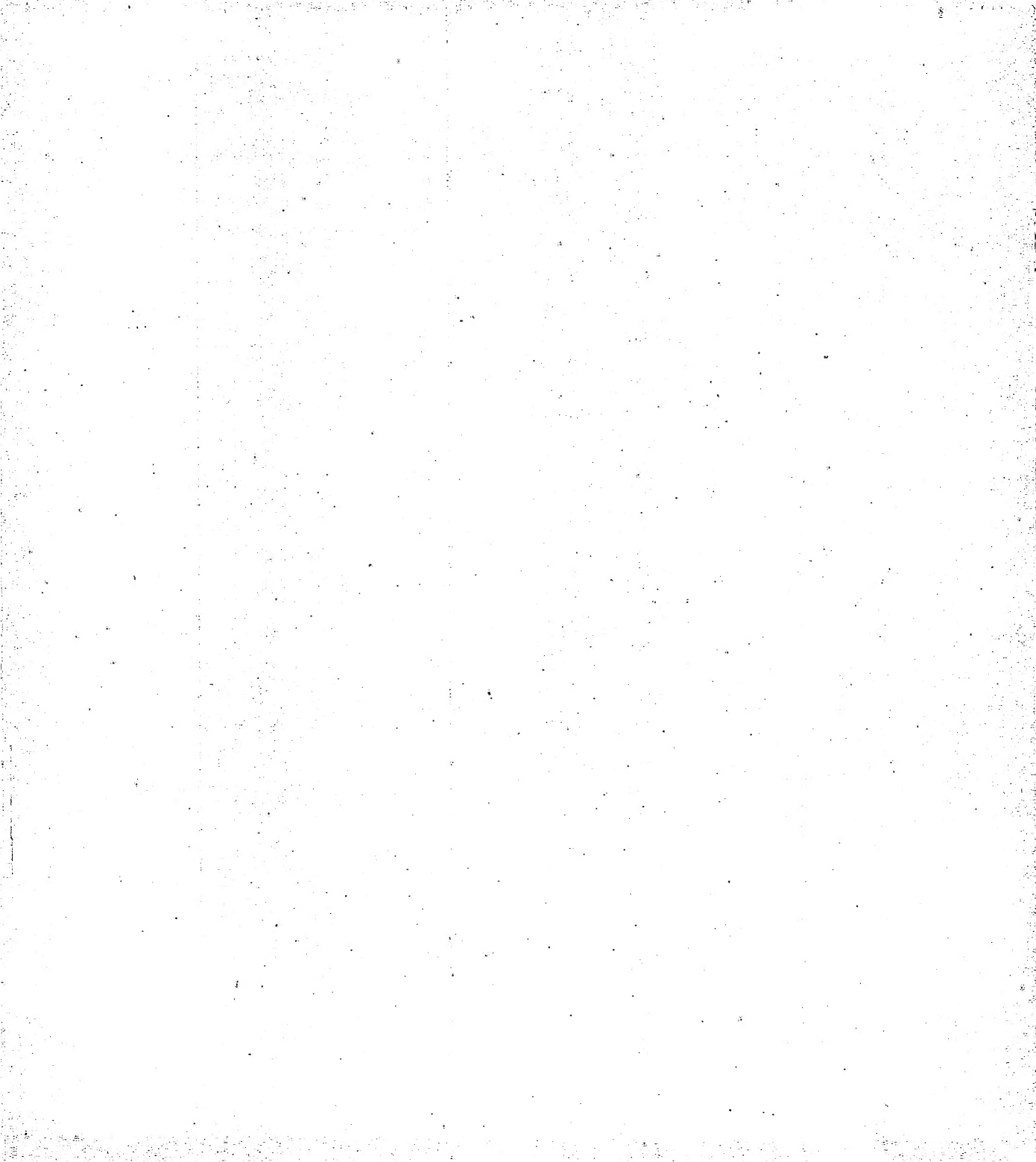SoftQuad

HoTMetaL
INTRaNET PUBLISHER

SoftQuad HoTMetaL intranet Publisher for Microsoft Windows
Reference Guide

Notice

Agencies of the United States Government please note:

Contents

Welcome to SoftQuad H.i.P.

Welcome to SoftQuad HoTMetaL intranet Publisher (H.i.P.), a tool for creating, maintaining, and monitoring your company's intranet.

What is SoftQuad H.i.P.?

SoftQuad H.i.P. is an integrated package of applications that help you easily build and maintain an intranet site. SoftQuad H.i.P. creatively uses advanced HTML (Hypertext Markup Language) to create a more dynamic and powerful way of sharing information. Users can create customizable tables of contents for documents, create their own HTML elements to enrich the document structure, and use cascading style sheets to enhance the style and presentation of the information. SoftQuad H.i.P. also uses several of its own extensions to HTML to produce pop-up windows, document annotations, and one-to-many hypertext links.

The SoftQuad H.i.P. package consists of four components:

- The *H.i.P. Information Manager*: the command center of SoftQuad H.i.P.
- The *H.i.P. Viewer*: plug-ins that let you read documents in H.i.P. format using your Netscape Navigator or Microsoft Internet Explorer Web browser.

- The *H.i.P. Editor*: create and edit individual H.i.P. or HTML documents.
- The *H.i.P. Monitor* keeps watch over your intranet for specified events.

These components work closely together to allow you to create, manage, and view shared information over your intranet.

About this manual

The SoftQuad H.i.P. reference manual consists of the following main sections:

- Welcome to SoftQuad HoTMetaL intranet Publisher (this section).
- *Getting Started*: an introduction to SoftQuad H.i.P.
- Sections on each of the main components of SoftQuad H.i.P.:
    - Welcome to the H.i.P. Information Manager
    - Welcome to the H.i.P. Viewer
    - Welcome to the H.i.P. Editor
    - H.i.P. Administration (i.e., the H.i.P. Monitor)

- A glossary.
- An index.

This manual addresses each component of H.i.P. individually. In cases where components have overlapping functionality, there is a cross-reference to the section that documents how to use that functionality.

There is a separate tutorial book entitled *Using H.i.P.* We strongly recommend that you work through the tutorial since it contains practical scenarios for using the various components of SoftQuad H.i.P. together.

Because SoftQuad H.i.P. documents are based on HTML, it is important that you understand at least the fundamentals of HTML in order for you to use SoftQuad H.i.P. The section on the H.i.P. Editor contains a chapter called *Core HTML*, which is an general introduction to the basic features of an HTML document. The tutorial book also contains a section on HTML.

In addition, the H.i.P. Editor's on-line help contains a detailed reference guide to all of the HTML elements and attributes. Choose the **HTML Reference Guide** command in the Editor's **Help** menu.

Windows 95 and Windows NT

SoftQuad H.i.P. runs almost identically under Windows 95 and Windows NT. The illustrations of dialog boxes and document windows in this manual show H.i.P. running under Windows 95. The layout and controls are the same in the corresponding dialog boxes under Windows NT. In this manual, the term *folder* is used for what Windows NT calls a *directory*. Any other platform-specific information is noted in the appropriate sections in the manual.

Using the manual

Throughout this manual, steps that you need to carry out in order to complete a task are marked with a solid , square bullet, i.e.:

■   Do this!

You will occasionally see a marginal icon like the one at left. This highlights a tip or notable feature of H.i.P. mentioned in the adjacent text.

Throughout this manual, the terms 'left' and 'right' mouse buttons refer to the default mappings of the mouse ('main' and 'secondary'). If you have a left-handed or non-standard mouse, please translate these terms into whatever vocabulary is appropriate for you.

The manual is thoroughly indexed. We have tried to anticipate the various keywords under which users may try to look up a topic, but sometimes you may have to try more than one before you get a 'hit'.

On-line help and other useful resources

The manual for each component of SoftQuad H.*i*.P. is available on-line, by choosing the **H.i.P. Help** command from the **Help** menu in each component of H.*i*.P. The on-line help is in H.*i*.P. format; to get the most out of the help documents, make sure you have installed the H.*i*.P. Viewer plug-ins for your default Web browser before you use the on-line help.

> **Note** Your intranet server must also be configured for the H.i.P. Viewer in order for you to retrieve H.i.P. documents over your intranet. See the H.i.P. Viewer section of this reference manual (page 137) for more information.

When you choose **H.i.P. Help**, the H.*i*.P. Viewer will be launched (if it isn't already), displaying an appropriate help file.

The help files have four Live TOCs (live tables of contents), which are displayed in the Live TOC portion of the H.*i*.P. Viewer window. There are three 'user defined' Live TOCs: **Main Heads** (this is the default, and displays the document headings non-hierarchically), **Commands** (displays all commands referred to in the file), and **Elements and Attributes** (displays all HTML elements and attributes referred to in the file). In addition to these, the H.*i*.P. Viewer defines a Live TOC called **Full Tree** that displays the document headings hierarchically.

You can switch views by clicking on the [icon] toolbar button and choosing a Live TOC from the pop-up menu that appears. **Commands** and **Elements and Attributes** may be blank for certain documents, depending on their contents.

The help files also have three *views* called **Full**, **Beginner**, and **Intermediate**. **Full** is the default and displays the entire contents of the file. You can switch views by clicking on the [icon] toolbar button and choosing a view from the pop-up menu that appears. These views may show identical content for some files. Note that clicking a link whose target is contained in a hidden part of a file will not be successful. If this occurs, you should choose the **Full** view for the file being linked to and try the link again.

See also the file *readme.wri* for last-minute information on SoftQuad H.*i*.P. This file is in the SoftQuad H.*i*.P. folder and is also available from the SoftQuad H.*i*.P. program group.

Getting started with SoftQuad H.i.P.

The following sections can be used as a 'quick-start' to each of the SoftQuad H.*i*.P. components and some other features of SoftQuad H.*i*.P. Each section provides a brief overview of the interface, functionality, and concepts of the component—enough to get you up-and-running. For more detailed explanations, please see the reference sections of the manual pertaining to that component, or try the H.*i*.P. Tutorial for a walkthrough.

The H.i.P. Information Manager

The H.*i*.P. Information Manager is the primary environment for working in SoftQuad H.*i*.P. From the Information Manager you can create, import, and organize intranet *projects* (groups of pages—usually organized by topic or user). You can manage and view projects in different ways:

- ☐ Add, edit, delete, and move H.*i*.P. document files (see page 57).
- ☐ View projects by files and folders, or with a map of links (see page 33).
- ☐ Find broken links and orphaned files (see page 60).
- ☐ Publish entire projects to your intranet (see page 123).

☐ Find, or find and replace text throughout entire projects (see page 119).

☐ Map external World Wide Web sites
(see page 131).

The Information Manager is also the launch pad for all of the other components of SoftQuad H.i.P. From here, you can launch applications to create:

☐ *Live tables of contents* (Live TOCs) for your intranet documents (see page 85)

☐ Cascading *style sheets* and custom document *views* (see page 89)

☐ *User-defined extensions* (UDEs)—custom HTML elements that *you* create (see page 79)

You can also launch the H.i.P. Editor and the H.i.P. Viewer from the Information Manager.

The Information Manager interface

To get started with creating, modifying, or managing a H.i.P. project, launch the Information Manager from the SoftQuad H.i.P. program group. Since you haven't loaded a project, the Information Manager window will be empty. The Information Manager interface consists of *panels*—divided sub-window areas, a *toolbar* (see page 8), and *menus* (see page 9).
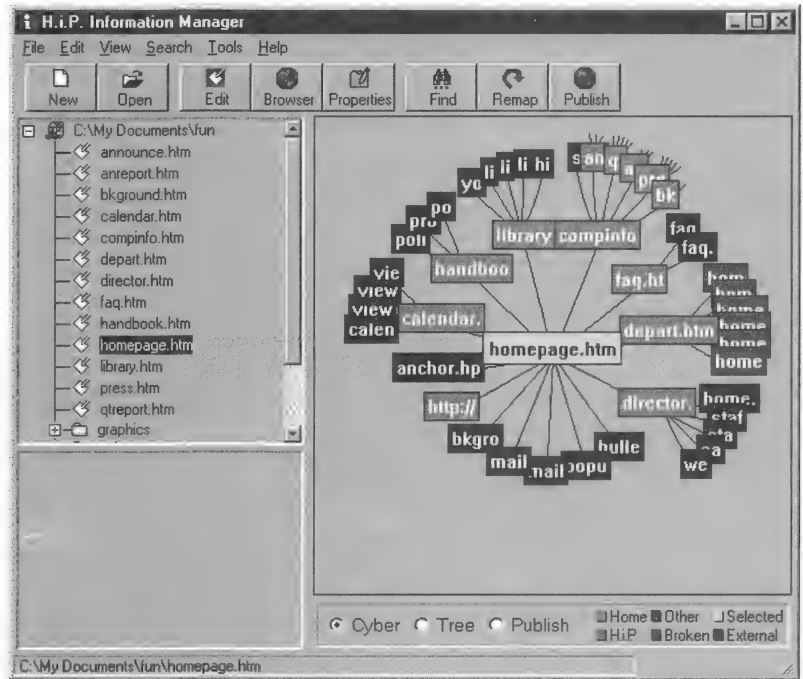
Information Manager with a simple project

Panels

The H.*i*.P. Information Manager window has three panels which show the same H.*i*.P. project in different ways:

1. The *Link* panel, showing hyperlinks between files, occupies the right side of the H.*i*.P. Information Manager window. The Link panel can show one of three different *displays*: the *cyberbolic* display, the *tree* display, and the *publish* display.

2. The *Project* panel, showing the files and folders within the H.*i*.P. project folder, occupies the upper left portion of the H.*i*.P. Information Manager window.

3. The *H.i.P. Pocket* panel, which can display user-selected groups of files, is in the lower left.

When you click on a file in any panel, the corresponding file will be selected in the other panels. The full sequence of folders containing the selected file will be shown in the status area at the bottom of the Information Manager window.

For more details about the panels and displays, see the H.i.P. Information Manager reference (page 30).

Toolbar

The toolbar buttons provide access to the most important commands. A *tooltip*—a short description of what a toolbar button does—appears above the toolbar buttons if you move your mouse pointer over them.

You can show or hide the toolbar by choosing **Toolbar** from the **View** menu. You can switch between small icon toolbar buttons and large toolbar buttons with labels by choosing **Toolbar Labels** from the **View** menu. A checkmark appears beside **Toolbar Labels** if toolbar labels are selected.

☐ *New*: launches the template wizard, guiding you through the creation of a new H.i.P. project. (See page 48.)

☐ *Open*: opens an existing H.i.P. project. (See page 48.)

☐ *Edit*: launches the appropriate editor for a selected file; i.e., the Live TOC editor if the selected file is a TOC definition list; the H.i.P. Editor if the file is an *.html* or *.htm* file, etc. (See page 85 for details on the Live TOC editor; page 79 for details on the UDE editor, page 89 for details on the style editor, and page 161 for details on the H.i.P. editor.)

☐ *Browser*: launches the H.i.P. Viewer (your Web browser—Netscape Navigator or Microsoft Internet Explorer—for which the H.i.P. Viewer plug-ins have been installed) and opens the selected file.

☐ *Properties*: launches the Document Properties dialog box (using the selected file); in this dialog you can create and modify many different aspects of H.i.P. documents, including user-defined extensions, live tables of contents, and cascading style sheets. (See page 22).

☐ *Find*: lets you search and replace text across a project. (See page 119.)

□   *Remap*: rebuilds the different project displays and shows any changes that have been made to your project.

□   *Publish*: lets you move your documents to the Intranet server and reorganize your links. (See page 123.)

Menus

All commands can be chosen from the menus. The following list gives a brief overview of the functionality in each menu of the H.*i*.P. Information Manager.

□ **File** menu: Creating, opening, and importing H.*i*.P. projects; creating and importing files; launching the H.*i*.P. Viewer and appropriate editors for H.*i*.P. files; exiting.

□ **Edit** menu: Copying, renaming, and deleting files.

□ **View** menu: Moving between different link displays; controlling toolbar and panel visibility; setting preferences (options).

□ **Search** menu: Finding and replacing text; finding broken links.

□ **Tools** menu: Editing Live TOCs, User-defined Extensions, and styles; Publishing; configuring a proxy server; mapping a remote site; rebuilding the link map.

□ **Help** menu: View on-line help.

Project management

One of the main purposes of the H.*i*.P. Information Manager is to help you create, import, and manage your H.*i*.P. projects. A project is a set of intranet pages. It will consist any number of *.htm* files, image files, style (*.css*) files, live table of contents (*.hpl*) files, user-defined extensions (*.hpe*) files, and any other auxiliary files that are linked to the documents in your project.

The **Open Project...** command is used for opening existing projects, whereas the **Import Project...** command is used to add HTML or convert and import word-processing documents into a project.

Importing a project

Importing a project means importing an existing set of HTML files or word processing files into the Information Manager.

- Choose **Import Project...** from the **File** menu.

A dialog box in which you specify a *home page* for the new H.i.P. project appears. The Information Manager examines the link and file structure of the new H.i.P. project based on the specified home page. The home page should be the logical starting point for the set of files in the project (i.e., it should link to the other files in the project). The home page is also the starting page for the cyberbolic and tree link displays. The home page file is usually called *index.html*, *index.htm*, *main.html*, or *main.htm*.

- Enter the name of the home page in the text box.

You can try importing existing sets of HTML files into SoftQuad H.i.P. to see how the Information Manager displays your project.

Creating a new project

When you click on the [New] toolbar button or choose **New Project...** from the **File** menu, the SoftQuad H.i.P. template wizard is launched, and guides you through the process of creating a new H.i.P. project.

You are prompted to choose between **New Project** and **Sample Projects and Templates**. Choose whichever option you want by clicking on the radio button. If you have chosen **Sample Projects and Templates,** you will be prompted to pick a sample project. A description of the sample project appears in the **Description** section.

Once you have selected the template you want to base your project on, a dialog box appears, asking you were you would like your project to be created. Select the appropriate folder, and your H.i.P. project templates will be copied there.

You must now begin to edit the H.i.P. template documents in order to insert your own information.

Opening an existing project

When you click on the [Open] toolbar button or choose **Open Project...** from the **File** menu, a dialog box appears, asking you to choose a H.i.P. project (*.hpp*) file. Navigate to the H.i.P. project file that you want to open and select it. The H.i.P. project will be opened in the Information Manager and its files displayed in the three panels.

Importing an existing file

To import an existing HTML file, choose the Import File... command from the File menu.

You must specify the file to be imported and the destination for that file. In the Import File text box, enter the path to the file that you would like to import. If you click on the [Browse...] button, a dialog box in which you can navigate to the file you wish to import will appear. When you have found the file, click on [OK] , and the path will be inserted into the Import File text box.

Choose the destination folder by either entering the path to that folder in the Destination text box or by selecting a folder from the folder view underneath that text box. When you have chosen both the file to import and its destination folder, click on [OK] in the file chooser; the file will be copied to the specified folder. Any files that are linked to the imported file will also be copied to the project. If linked files are contained in subfolders in the current location, the same folder and file structure will be re-created in the new location. You will be warned of any name conflicts with existing files and folders. The Information Manager will rebuild the views to show the new H.i.P. file that you have imported.

> **Note** A file imported into your H.i.P. project might not have any links to other files in your project. You may need to edit the file and add links to existing H.i.P. files in order to make the file part of the H.i.P. project; that is, launch the H.i.P. Editor with the new file and create links to the appropriate files that already exist in your project.

Moving, copying, deleting and renaming H.i.P. files

In the Project panel, you can move, copy, and delete files much as you would in the Windows Explorer or Windows File Manager—by dragging and dropping files and folders or selecting files and folders and using menu commands. However, the H.i.P. Information Manager has the added advantage of updating links in your project to account for changes to file names and locations.

To move one or more files, select the files and drag them to their new location. The Project display will be automatically updated to show the new location of the files.

Note Be careful! Like Windows Explorer or Windows File Manager, the Project panel shows the actual structure of the files in your H.i.P. project; if you move or delete a file in the Project panel, the actual file is moved or deleted from your hard disk.

When you move a file, all of the hypertext links that refer to that file in your H.i.P. project will be updated to refer to that file's new location automatically by the H.i.P. Information Manager. In other words, you need not edit each individual file that is linked to the moved file and update URLs based on the file's location; the Information Manager will do it for you. However, when you move a file, the links *within* that file to other files are *not* updated; in other words, moving the file will correctly change the files that *refer* to the moved file, but may create broken links *in* that moved file.

Viewing or editing a file

Right-clicking on a file in the cyberbolic interface brings up a pop-up menu that lets you view or edit the file.

☐ **Edit File:** launches the appropriate H.i.P. editor with the selected file (i.e., this command will launch the UDE editor if the selected file is a UDE definition list, the H.i.P. Editor if the file is a *.htm* or *.html* file, etc.)

☐ **View in Browser:** launches the H.i.P. Viewer with the selected file.

☐ **Show all Links:** recalculates the links for a file.

For a detailed reference on the H.i.P. Information Manager please see *Welcome to the H.i.P. Information Manager* (page 25).

The H.i.P. Viewer

The H.*i*.P. Viewer (see page 135) consists of plug-in files for your Netscape Navigator or Microsoft Internet Explorer web browser. The plug-ins create dynamic *live tables of contents* for any H.*i*.P. document that you load into the browser, and allow users to view H.*i*.P. *pop-ups* and *one-to-many links* (multilocs).

> **Note** The H.i.P. Viewer uses JavaScript to display H.i.P. documents. If it isn't already enabled, you must enable JavaScript in your browser in order to use the H.i.P. Viewer. See your browser documentation for information on enabling JavaScript.

Loading a H.i.P. page

Because the Viewer component of SoftQuad H.*i*.P. works with your existing browser, the H.*i*.P. Viewer plug-ins will automatically be used when you load a H.*i*.P. file. You can also launch the Viewer from the H.*i*.P. Information Manager by clicking on the document you want to view in the Project panel or Link panel, and doing one of the following:

– Choosing **View in Browser** in the **File** menu.

– Clicking on the ▨ (launch browser) toolbar button.

– Right-clicking and choosing **View in Browser**.

This will launch your browser with the H.*i*.P. Viewer plug-in and load the page that you selected. From the H.*i*.P. Editor, you can display the current H.*i*.P. document in the Viewer by using the **Preview** command (see page 172).

When you load a H.*i*.P. document in the Viewer, the window splits into two panels. The left panel is the table of contents panel, and the right is the document panel. The table of contents window contains a *Live* (i.e., dynamic) *Table of Contents* (Live TOC) generated from the document. The table of contents window has a toolbar at the top. The document window displays your H.*i*.P. document the way your browser normally displays HTML documents, but supports some of the special H.*i*.P. extensions (pop-ups and multilocs) as well.

Live tables of contents

A Live TOC generally consists of the text of the headings (H1-H6 elements) in the document. If you click on an item in the Live TOC, the view in the document window will jump to the corresponding location in the document. You can adjust the Live TOC's levels of nested headings by clicking on the ▣ (contract) or ▣ (expand) icon next to the Live TOC entry. The TOC is fully expanded by default.

The toolbar

Using the H.i.P. Viewer involves more than just browsing HTML documents. From the toolbar at the top of the table of contents window you can:

- ☐ **Change Live TOC:** choose a different table of contents, create a new table of contents, or edit an existing table of contents (based on different elements in the document) using the Live TOC editor.

- ☐ **Sort the Live TOC:** sort the live table of contents in either ascending or descending alphabetical order. This re-orders only the Live TOC window and not the document window.

- ☐ **Expansion Level:** select the level of nested headings and subheadings displayed in the table of contents.

- ☐ **Change View:** choose author-defined alternate views of the document. For example, a technical manual may have views for introductory, intermediate, or advanced information.

- ☐ **Search:** perform a context-sensitive search on the document. You can search for words or patterns within elements.

- ☐ **Annotate:** create and read notes or comments about the document. You can view annotations made by other people, or make your own.

- ☐ **Subscribe:** instruct the H.i.P. Monitor to notify you when a specific page, pages by a particular author, or pages on a particular topic have been updated.

☐   **Options:** select options for the H.*i*.P. Viewer, (e.g., default Live TOC expansion level, user name, e-mail address).

☐   **Help:** view the on-line help (in H.*i*.P. format).

The document window

In the document window you can view special H.*i*.P. features such as pop-up windows and one-to-many links (multilocs).

☐   Pop-ups can appear either inline (as part of the text) or block (in a separate window).

     –   Inline pop-ups appear as ⬚ icons in the document window. Clicking on an inline pop-up opens a plain text pop-up window that will disappear if you click anywhere else on your screen.

     –   Block pop-ups appear as block icons (on a separate line from other text). The block pop-up icon can be any image the author chooses, but the default is:

Clicking on a block pop-up opens a new browser window that can contain HTML, images, links, etc. This window will remain open until you close it by double-clicking on the control button in the top left corner.

☐   A one-to-many link (multiloc) is a menu of links. A multiloc appears as a small ⬚ icon in the H.*i*.P. Viewer. When you click on the icon, a pop-up menu will appear, displaying all of the links accessible from that single location. Choose the link you want to go to. Some items can *fly-out* to reveal sub-items.
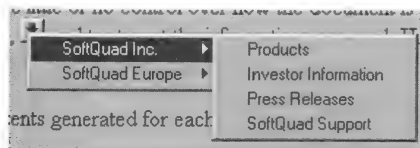
The H.i.P. Editor

While the H.i.P. Information Manager gives you a project-wide view, the H.i.P. Editor (see page 161) is for creating and editing individual HTML or H.i.P. files. Based on SoftQuad HoTMetaL, the H.i.P. Editor is a professional HTML authoring tool with additional capabilities for creating documents for SoftQuad H.i.P.

The H.i.P. Editor integrates all the power of a word-processor with the tools for creating proper HTML documents for the Web or an intranet. Using the H.i.P. Editor, you can:

☐ Create new H.i.P. documents, edit existing H.i.P. or HTML documents, or import documents from popular word processing formats and convert them to valid HTML.

☐ Use H.i.P. features such as user-defined extensions, pop-ups, and one-to-many links.

☐ Validate your documents for both HTML conformance and for accessibility to users with disabilities.

☐ Create and edit graphics for your documents using the MetalWorks graphics editor and image mapper.

☐ Launch the H.i.P. **Document Properties** dialog and the H.i.P. file editors (e.g., Live TOC editor).

Launching the H.i.P. Editor

Launch the Editor from the Windows Start menu or by double-clicking on its icon in the SoftQuad H.i.P. program group. You can also launch it from the H.i.P. Information Manager by selecting the *.htm* or *.html* file or template you want to edit, then clicking on the (**Edit File...**) toolbar button, or by right-clicking on the filename in the Project panel and choosing **Edit File...** from the pop-up menu, or **Edit File...** from the **File** menu. This launches the H.i.P. Editor and loads the file or template that you chose.

Overview of menus

This section provides a summary of the main features.

☐ **File** menu: file manipulation; e.g., opening and saving files, converting to and from H.i.P. format, setting document properties.

☐ **Edit** menu: cutting and pasting, find and replace, spell checking, merge/remove annotations.

☐ **View** menu: local display formatting; show and hide tag items; view source file.

☐ **Markup** menu: inserting and changing markup, creating and editing anchors.

☐ **Format** menu: text style, alignment, and color; backgrounds.

☐ **Tools** menu: image, table, and frame editing; accessibility tools; find and replace URLs.

☐ **Forms** menu: inserting and editing forms.

☐ **Special** menu: checking document conformance, creating and running macros, options.

☐ **Window** menu: appearance and control of document windows.

☐ **Help** menu: on-line help, other help documents.

Creating, opening and editing files

When you launch the H.i.P. Editor from its program icon, there is no open file. To create a new file using a default template:

■ Click on the ▯ toolbar button, type ⟨Ctrl+N⟩ at the keyboard, or choose **New...** from the **File** menu.

You can choose a different default template in the **Defaults for New/Open** section of the **Options** dialog box.

Templates are pre-defined structures for documents. They are used as forms or document outlines into which you can enter text without necessarily having to insert any of the markup yourself. To use project templates provided with SoftQuad H.i.P., you first need to create a new project in the H.i.P. Information Manager (see page 10), then load the specific document template into the H.i.P. Editor.

Note Unless you want to edit the templates themselves, do not open the template files directly from the Templates folder. These files should be first copied to the directory for the project based on the Template Wizard.

Editing an existing file

If you already have an HTML or H.i.P. file that you want to edit:

■ To open a file directly from the H.i.P. Editor, choose the **Open...** command in the **File** menu, type Ctrl+O at the keyboard, or click on the toolbar button.

■ In the dialog box that appears, choose the H.i.P. or HTML file that you want to edit. Once you've done this, the H.i.P. Editor opens the file and you can begin editing.

You can also launch the H.i.P. Editor with a file from the H.i.P. Information Manager

■ In the H.i.P. Information Manager, click on the HTML file you want to edit in the project list, the cyberbolic view, or the tree view, and then do one of the following:

– Click the toolbar button.

– Choose **Edit File** from the **File** menu.

– Right-click and choose **Edit File** from the pop-up menu.

This will launch the H.i.P. Editor and load the file you chose.

The H.i.P. Editor will try to open H.i.P. or HTML files even if they contain bad markup, but occasionally the markup will prevent it from opening a file. If the Editor can't open the file, you will get an error message; see page 246 for details.

In addition to opening H.i.P. and HTML documents, the H.i.P. Editor can open files in a number of common word-processing formats. These files are converted to HTML. See the section *Opening a file* (page 242) for more information.

Now what?

Now that you have an open file, you can start entering text and markup. The *markup* consists of:

– *Elements*, which surround parts of the document according to their function or appearance. Elements begin with 'start-tags' ⟨ P ⟩ and end with 'end-tags' ⟨ /P ⟩ . You can enter elements by using the toolbars (see page 175) or the Markup menu (see page 255).

– *Attributes*, which are values associated with elements, but are not part of the content. You can enter or change attributes for the current element by choosing the **Element Attributes...** command in the **Markup** menu, right-clicking inside an element and choosing **Element Attributes...** from the pop-up menu that appears, or typing ⟨ F6 ⟩ at the keyboard).

If you're unsure of what to do at this point, we suggest that you try the H.i.P. Editor tutorial in the *Using H.i.P.* manual, which has exercises demonstrating the main features of H.i.P., the H.i.P. Editor, and HTML.

The H.i.P. Monitor

The H.i.P. Monitor (see page 375) is a system administration tool that keeps watch and tests your intranet server, operating system, server clients and their pages 24-hours a day. The H.i.P. Monitor works with the other components of SoftQuad H.i.P. to allow you to publish and remove pages at a specified time, and to inform users who subscribed to certain pages through the H.i.P. Viewer that those pages have changed.

The H.i.P. Monitor can detect and report such things as:

☐ *Server software events*: server down, network process down, suspicious requests.

☐ *Server operating system events*: disk too full, root login, user login.

☐ *Client events*: page expired, broken links, page effective, replace page, project published.

Launching the
H.i.P. Monitor

The H.i.P. Monitor is accessed through a browser. When you launch the H.i.P. Monitor Event Browser or the H.i.P. Monitor configuration tool from the SoftQuad H.i.P. program group, you are actually loading an HTML document into your browser. All of your work in the H.i.P. Monitor is done by filling out HTML forms that are processed by a program on your intranet server.

Of course, the administration pages are not 'public'. They're your pages and require a password to access them. Once you have installed the H.i.P. Monitor on your intranet server, you can surf to the Monitor homepage:

- Start the H.i.P. Monitor from the H.i.P. Program Group.

When your browser appears, it will present the H.i.P. Monitor's homepage.

- Place the homepage in your **Bookmarks** or **Favorites** list.

Much or what the H.i.P. Monitor does requires reporting to you, the administrator. You can read the Monitor's weekly reports, as you might expect, by surfing to the Monitor's intranet page and clicking on the appropriate week. Here you will find a list of everything (within the Monitor's responsibilities) that has happened during the week: operating system alerts, suspicious requests, root logins, broken H.i.P. page links— you name it. You can look at a weekly report now, though, if you have just installed the software, there shouldn't yet be any events recorded.

- Click on **Browse Events**.

The **Browse Events** page presents a table of dated events that have occurred in the current Monitor week (beginning Sunday night). You can move from week to week by clicking on PREVIOUS WEEK or FOLLOWING WEEK. Clicking on these now will have no effect because there isn't yet a history of events to view. Return to the H.i.P. Monitor homepage (actually its menu page) by clicking on the word MENU in the banner that spans the top of your page.

A note about file formats

Although H.i.P. documents are HTML documents, there is some special HTML markup included in a H.i.P. document so that the H.i.P. Viewer will display the document with all the H.i.P. Viewer features. This markup consists of:

- A SCRIPT element in the documents' HEAD element, containing a *JavaScript* program.
- A FRAMESET that defines the frames displayed in the H.i.P. Viewer.
- A NOFRAMES element that contains the BODY of the original document.
- A link to an auxiliary file called *epsilon.hpv* in the same folder.

This special SoftQuad H.i.P. markup is hidden from view in the H.i.P. Editor. While you can open the file with a text editor to see what the markup looks like, *do not edit* the H.i.P. sections of the document—it will not load properly in the H.i.P. Viewer. You can learn the technical details (useful if you are automating intranet publishing) about the file formats used by SoftQuad H.i.P. in the *File and markup formats* appendix (page 413).

You can use plain HTML documents in your H.i.P. projects, but in order to view the document with H.i.P. features—such as Live Tables of Contents, views, and annotations—in the H.i.P. Viewer, you need to convert documents to SoftQuad H.i.P. format. This does not alter the content of the document; 'H.i.P.-ification' just adds some special HTML markup that tells the H.i.P. Viewer plug-ins to start when you load the document into your Web browser. You can H.i.P.-ify your documents on a project level from the H.i.P. Information Manager (see page 56) or as you create and edit them in the H.i.P. Editor (see page 249).

Document properties

The H.i.P. Document Properties dialog can be launched from both the H.i.P. Information Manager and the H.i.P. Editor; it lets you create and modify many different properties of your H.i.P. documents. There are two classes of information that you can set in the H.i.P. Document Properties dialog:

☐ You can configure SoftQuad H.i.P. to update and publish pages according to information that you set in the H.i.P. Document Properties dialog. The H.i.P. Monitor, which helps you to manage your intranet by monitoring pages and sites for specified events, keeps track of these pieces of information. See page 375 for more details on the H.i.P. Monitor.

☐ You can link to files which define User-defined extensions, Cascading Style Sheets, Live tables of contents, and other important H.i.P. files which are used to expand the capabilities of your projects.

To launch the H.i.P. H.i.P. Document Properties dialog from the H.i.P. Information Manager, click on an .htm or .html file in the project display and then choose Document Properties from the Edit menu. The H.i.P. Document Properties dialog is launched by choosing Properties from the File menu by clicking on the 🖼 toolbar button in the H.i.P. Editor.

The H.i.P. Document Properties dialog is divided into four tabbed sections: General, Effective Date, UDEs, and Properties. Click on a tab to go to that section of the dialog. The following list describes the tabbed sections and their contents. More information on each section of the H.i.P. Document Properties dialog can be found in the following sections in this manual.

☐ General tab: allows the user to set the document title, description and author in the Document Attributes section. The File Information section shows the creation date and modification date of the H.i.P. document. See page 65 for more details on the General section of the H.i.P. Document Properties dialog.

☐ Effective Date tab: allows the user to set information used by SoftQuad H.i.P. when publishing documents; e.g., effective date, expiry date. See page 66 for more details on the Effective Date section of the H.i.P. Document Properties dialog box. See page 375 for more details on the H.i.P. Monitor.

- ☐ **UDEs** tab: allows the user to access **user-defined extensions** for the document. From here, the user can attach an existing UDE definition file, or create a new UDE file by invoking the UDE editor. See page 79 for more details on UDEs.

- ☐ **Properties** tab: allows the user to load, delete, and edit style sheets, Live TOCs, Topics, and Custom METAS; that is, document meta-information. See page 71 for more details on the **Properties** section of the H.i.P. **Document Properties** dialog box. See page 89 for more details on style sheets and page 85 for more details on Live TOCs.

Welcome to the H.i.P. Information Manager!

The H.i.P. Information Manager is the basic working area of SoftQuad HoTMetaL intranet Publisher (H.i.P.) for document creators and intranet managers. The Information Manager is the program that you use to organize files and create special SoftQuad H.i.P. features. It is also the 'launching pad' for the other components of SoftQuad H.i.P.: the H.i.P. Editor (for editing individual H.i.P. files), and the H.i.P. Viewer (Web browsers with special plug-ins to support SoftQuad H.i.P. features).

H.i.P. files are arranged in *projects*. A project is a collection of files, sometimes arranged in folders and subfolders, along with other associated files, such as image and sound files, other multimedia files, and even word processing and text files. Projects also contain special auxiliary files that support extended SoftQuad H.i.P. functionality. Files in H.i.P. projects can be standard HTML (Hypertext Markup Language) files; see page 199 for a description of HTML and how it is used.

The core of SoftQuad H.i.P. is the use of special markup that creatively uses the HTML 3.2 standard in order to create a richer and more powerful environment for sharing information. Files that use this special markup are called H.i.P. documents. (See page 27 and page 56 for more details on the H.i.P. format and converting to the H.i.P. format.) Users can create tables of contents for their H.i.P. documents, set up different styles (views), create new elements to organize and enrich information, and use

other special SoftQuad H.*i*.P. features that are described in the following chapters.

In general, H.*i*.P. projects are used to organize documents by topic or by user; for example, you might create a H.*i*.P. project for sharing information about a product that your company manufactures. H.*i*.P. projects can contain sub-projects: for example, several people might contribute information on different aspects of your company's product—sales, marketing, development, documentation—and might create their own H.*i*.P. projects, which would then be gathered into one large H.*i*.P. project. The Information Manager is used to manage projects in just this way; see page 47 for more details on how to manage projects.

The Information Manager lets you perform the following functions:

☐ Create and manage your H.*i*.P. projects: add, delete, and move H.*i*.P. files while preserving their link structure; rename a file and have all links to that file updated (see page 47).

☐ View your H.*i*.P. projects by files and folders or by hyperlink structures (see page 29).

☐ Check for broken links (links to files that don't exist) and orphaned files (files without links to them) (see page 60).

☐ Search your H.*i*.P. projects based on various criteria and replace text across files (see page 119).

☐ Launch the H.*i*.P. Editor and H.*i*.P. Viewer (see page 31).

☐ Publish your H.*i*.P. projects; i.e., move them to a server on a local network (see page 123).

☐ Create and modify important SoftQuad H.*i*.P. features:

    ☐ User-defined extensions (see page 79).

    ☐ Live tables of contents (see page 85).

    ☐ Cascading style sheets (see page 89).

☐ Map World Wide Web sites (see page 131).

The Information Manager performs actions on different levels of a H.*i*.P. project: it has commands that manipulate H.*i*.P. files, commands that create or modify H.*i*.P. *auxiliary files*, and commands that manage the H.*i*.P. project as a whole. Some Information Manager commands apply to individual *documents* in a H.*i*.P. project: commands such as viewing, editing, creating new files, moving files, etc. Other commands create auxiliary

files, which may be attached to selected H.*i*.P. files (creating user-defined extensions, live tables of contents, and cascading style sheets, and using topics). Still other commands work on the *project* level (searching, publishing, checking for broken links).

File formats for H.i.P.

Your SoftQuad H.*i*.P. project can include both regular HTML documents and H.*i*.P. HTML documents. While H.*i*.P. documents are HTML documents, there is some special HTML markup included in a H.*i*.P. document so that the H.*i*.P. Viewer will display the document with all the H.*i*.P. Viewer features, such as live tables of contents, Views, and annotations. If you use plain HTML documents in your H.*i*.P. projects, not all the special H.*i*.P. Viewer features will be accessible.

In order to use the H.*i*.P. Viewer features of H.*i*.P., you may need to convert documents to SoftQuad H.*i*.P. format. This does not alter the content of the document: 'H.*i*.P. -ification' adds some special HTML markup but doesn't take any markup away. See page 56 for details of H.*i*.P. -ifying documents. (Once you have H.*i*.P. -ified a document, you need not worry about this special SoftQuad H.*i*.P. markup; the H.*i*.P. Editor and H.*i*.P. Information Manager deal with it behind the scenes.)

The Information Manager Interface

To get started with creating, modifying, or managing a H.*i*.P. project, launch the Information Manager by selecting it from the **Start** menu or double-clicking on its icon in the Windows Explorer or H.*i*.P. folder window. The Information Manager window is empty—no project is loaded—when you first launch it. The Information Manager interface consists of:

- three *panels*—divided sub-window areas—which may contain different *displays* (see the next page).
- a *toolbar* (see page 42).
- *menus* (see page 43).

Panels

The Information Manager window has three panels, which are empty if no H.i.P. project has been loaded. The *Project* panel, showing the files and folders within the H.i.P. project folder, occupies the upper left portion of the Information Manager window; the *H.i.P. Pocket* panel, showing user-selected groups of files, is in the lower left; and the *Link* panel, showing hyperlinks between files, occupies the right side of the Information Manager window. The Link panel can show one of three different *displays*:

- the *cyberbolic* display (see page 34)
- the *tree* display (see page 40)
- the *publish* display (see page 123)

You can resize the panels by moving your mouse cursor over the separators between the panels. When the cursor changes to a double-headed 'move' arrow, drag the separators by clicking the mouse button and holding it down as you move the mouse.

An important thing to realize about the Information Manager panels is that they show the same H.i.P. project in different ways: you can see files, links, or selected files depending on whether you are looking at the Project panel, Link panel, or H.i.P. Pocket panel. As well, when you click on a particular file in any panel, the corresponding file will be selected in the other panels. For example, if you select a file in the H.i.P. Pocket panel, the file will also be selected in both the Project panel and the Link panel; if the cyberbolic display is visible, it will rotate to show the selected file. The sequence of folders containing the selected file—the *path*—will be shown in the status area at the bottom of the Information Manager window.

Project panel

The Project panel shows the actual structure of the files in your project; that is, it shows the folders, subfolders, and the files they contain. The icons that are used to represent files give you some information about the content of the files:

- □ 　 : the home folder of the project.

- □ 　 : a sub-folder of the project.

- □ 　 : an open sub-folder, revealing its contents.

- □ 　 : a H.i.P. document in your project.

- □ 　 : an HTML document in your project.

- □ 　 : a file not linked to any other file in the project (an orphaned file). Icons for orphaned files have a red triangle in the lower right corner.

- □ 　 : an image file.

- □ 　 : a sound or multimedia file.

In addition, there are special icons for auxiliary files in your H.i.P. project:

- □ 　 : a cascading style sheet (.css) file (see page 89 for more details on styles).

- □ 　 : an annotation (.hpa) file (see page 154 for more details on creating and managing annotations).

- □ 　 : a user-defined extensions (.hpe) file (see page 79 for more details on user-defined extensions).

- □ 　 : a live table of contents (.hpl) file (see page 85 for more details on live tables of contents).

- □ 　 : a topic (.hpo) file (see page 75 for more details on topics).

You can collapse or expand folders (that is, view or hide the files in those folders) by clicking on the 田 or 日 icon to the left of the folder or home icon.

Right-clicking on a file in the Project panel brings up a pop-up menu that allows you to choose various editing and file management commands:

Edit File
View in Browser
Convert To H.i.P.
Convert From H.i.P.
Copy
Paste
Delete
Rename
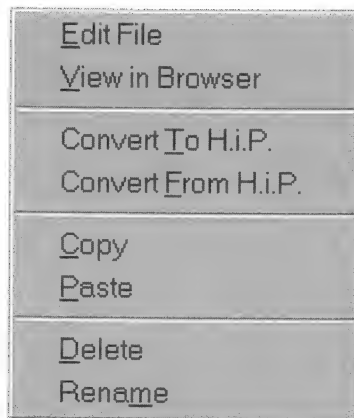
☐ **Edit File:** launches the appropriate editor with the selected file (H.*i*.P. Editor, UDE editor, Live TOC editor, etc.). This menu item will be grayed out when an image, sound, or other multimedia file is selected.

☐ **View in Browser:** launches your Web browser (Netscape Navigator or Microsoft Internet Explorer) with the selected file.

☐ **Convert to H.i.P.:** adds the special H.*i*.P. markup to the selected HTML document. This command is grayed out if the selected document is a H.*i*.P. document or non-HTML file. The icon will change once the document has had H.*i*.P. markup added.

☐ **Convert from H.i.P.:** removes the special H.*i*.P. markup from the selected H.*i*.P. document. This command is grayed out if the selected document is not a H.*i*.P. document.

☐ **Copy:** copies the selected file.

☐ **Paste:** pastes a file that you have copied.

☐ **Delete:** deletes the selected file. This is a real deletion and either deletes the file (under Windows NT 3.51) or sends the file to the Windows 95 / Windows NT 4.0 Recycle Bin, so be careful!

☐ **Rename:** allows you to rename the selected file, and updates all links to the file in the current project with the new filename.

For more details of how to create, delete, copy, and move files in the project display, using pop-up menus or the **Edit** menu, see page 47.

Link panel

The Link panel occupies the right side of the Information Manager window. There are three different possible displays in the Link panel: you can view your project in a *cyberbolic* display, in a *tree* display, or you can change to a *publishing* display when you are ready to move your project to a server. To move between the different link displays, click on the Cyber, Tree, or Publish radio buttons at the bottom of the Link panel. You can also choose Cyberbolic Link View or Tree Link View from the View menu, or click the [Publish] toolbar button. For more details about the Publish command, see page 123.

The tree link display and the cyberbolic display do not show the file structure of your H.i.P. project; instead, they show the structure of the *hyperlinks*. While each icon in the link display represents a file, the structure of the link display reflects the *links* between files, and not the actual file and folder structure. That is, if a file makes a reference to another file by using an IMG, A, or other HTML element containing a URL (Uniform Resource Locator), the file that the link refers to and the file that contains the link will be connected by a line in the link displays.

The link displays show both local and external links (e.g., links to pages on the World Wide Web). However, the Information Manager does not automatically check the validity of those off-site links, nor does it show pages linked to those off-site Web pages. You can check whether the off-site hyperlinks are valid by choosing the Find External Broken Links command from the Search menu. See page 132 for details.

> **Note** Since the link displays only show files that are linked to one another, they will not show files in the HiP project that aren't linked to by any other file. You can see those 'orphaned' files in the Project panel, and you can identify and group orphaned files by choosing the command 'Find Orphaned Files' (see page 60 for details).

Cyberbolic display

The cyberbolic display shows the link structure of your H.i.P. project as if it were sliding on the surface of a sphere. It's a great way to check the validity of links in your document, get a sense of the overall shape of your H.i.P. project, and determine the route that users will follow when they access your information.

The cyberbolic display starts from a *home page* that you choose when importing a project: all links go 'outwards' from the home page. The first time you view a project with the cyberbolic display, the home page is positioned at the center of the panel. To navigate around the cyberbolic interface and move other files closer to or farther away from the center of the cyberbolic display, move your mouse cursor in the panel until it becomes a hand. Clicking the left mouse button causes the hand to 'grip'; keeping the mouse button held down allows you to move the cyberbolic display over the surface of the sphere, moving different files into view.

By default, the names of the files in the cyberbolic display are generated as follows:

☐ HTML files and H.i.P. files—which have either the *.htm* or *.html* extension—will be referred to in the cyberbolic display using the content of their TITLE elements.

☐ image files (e.g., *.gif*, *.jpg* files) and other files linked to HTML or H.i.P. documents will be referred to using the content of the ALT attribute from their link element, if any. If there is no ALT element content, the actual file name is used instead.

For example, an IMG element whose SRC attribute is '*fred.gif*' and whose ALT attribute is 'picture of Fred' will be seen in the cyberbolic display with the name 'picture of Fred'. If there were no ALT attribute in this IMG element, the file would be shown in the cyberbolic display with the name 'fred.gif'. You can show filenames instead of the content of TITLE or ALT by right-clicking on the background of the cyberbolic display and choosing Show Filenames ; see page 39.

Links in the cyberbolic display

The filenames in the cyberbolic display have different colors, which show how they are linked to the project. The following legend appears at the bottom of the cyberbolic display:

⬛ Home ⬛ Other ⬛ Selected
⬛ H.i.P. ⬛ Broken ⬛ External
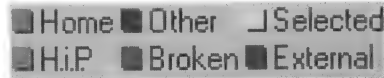
The different colors of the files in the cyberbolic display indicate the different types of links in a H.i.P. project:

☐ Black: plain HTML file, image file, other file, etc.
☐ Grey: H.i.P. file (HTML file plus added H.i.P. extensions)
☐ Green: home page of the project
☐ Red: broken link
☐ Blue: external (e.g., World Wide Web) link, outside the local filesystem

The currently selected file is shown in yellow.

When you select any file in the cyberbolic display, the path to that file is shown at the bottom of the Information Manager window, and the corresponding file is highlighted in the project display and H.i.P. Pocket (if present), allowing you to compare the link display with the actual file and folder structure of the H.i.P. project.

The cyberbolic display does have certain limitations. The display is based on a home page, and all links are shown relative to that home page, and 'outward' from the links on that home page. This means that 'sideways' links between documents are not immediately visible; only links that go outward from the home page are visible. For example:

a.htm

b.htm   **d.htm**
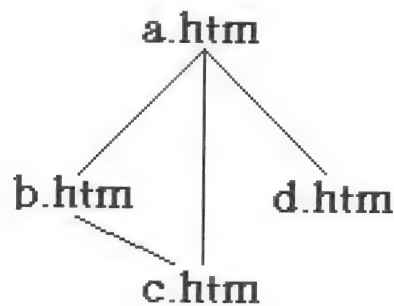
c.htm

In this diagram, there are links between file *a.htm* (the home page) and the files *b.htm*, *c.htm*, and *d.htm*. There is also a 'sideways' link between *b.htm* and *c.htm*. The cyberbolic display, working outwards from the home page, *a.htm*, would show the links to files *b.htm*, *c.htm*, and *d.htm*; however, it does not show the link between *b.htm* and *c.htm*:

d.htm

a.htm   c.htm

b.htm
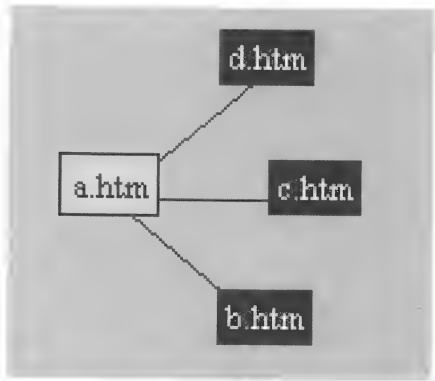
However, you can recalculate the cyberbolic display to show all links based on a selected file. Choose Show All Links from the pop-up menu that appears when you right-click on a file in the cyberbolic display. Choosing Show All Links shows all links based on the selected file, and not just the links that radiate outward from the home page. If links are recalculated when the *b.htm* file is selected, the following cyberbolic display would be shown:
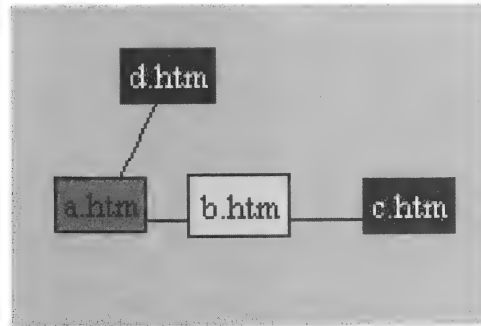
In this case, the links between *b.htm* and *c.htm* are shown, since the links have been recalculated based on *b.htm*.

Viewing options in the cyberbolic display

Right-clicking on the background of the cyberbolic display brings up a pop-up menu that allows you to set viewing options:
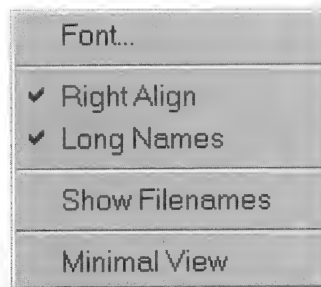
☐ Font: Allows you to modify the font, font size, font style and font color used to display the cyberbolic links. The following dialog box appears when you select Font:
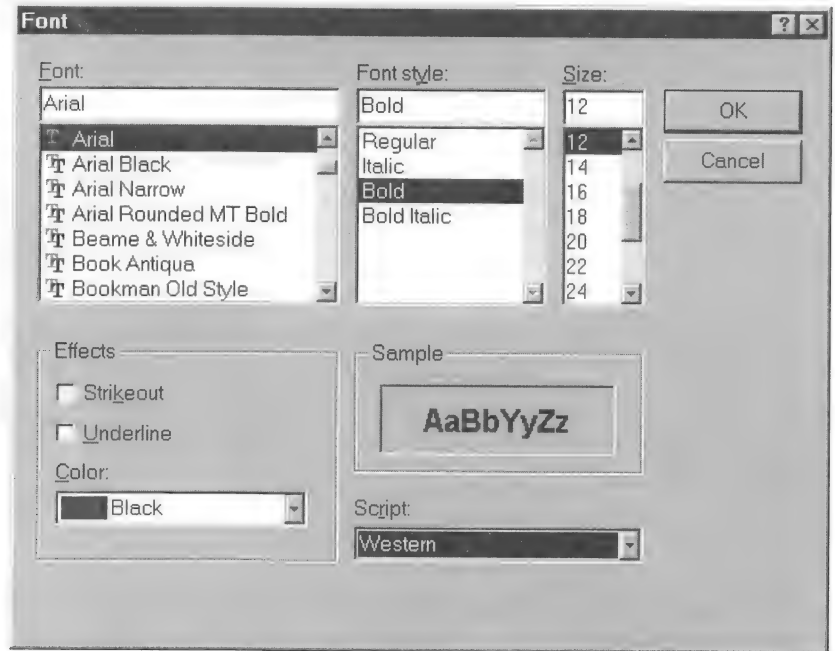
You can choose a font from the Font list. Similarly, the various styles—bold and italic—and the point sizes of the fonts can be selected from the Font style list or Size list respectively, or entered into the appropriate text box. You can choose Effects (strikeout and underline), or select a font color from the drop-down list. Script lists the language scripts available for the particular font you have selected. An example of how the chosen font and options will look is shown in the Sample area. To apply the current settings, click on the OK button; click on Cancel to close the dialog box without making any font changes.

☐ Right Align: toggles between displaying files linked to the home page clustered at the right edge of the cyberbolic 'sphere' and displaying them spaced around the entire sphere.

☐ **Long Names:** toggles between full and truncated link names. Sometimes the cyberbolic display is easier to read if the link names are abbreviated.

☐ **Show Filenames / Show Titles:** toggles between using file names as the file labels or using the content of the TITLE element or ALT attribute, if any. (Files without TITLE elements will always be shown with a file name, as will image files or other linked data files without an ALT attribute in their linking element.)

☐ **Full View / Minimal View:** toggles between a display that shows all linked files in the project and a display that shows only HTML and H.i.P. linked files; i.e., doesn't show image files or other non-HTML project files.

Viewing or editing a file

Right-clicking on a file in the cyberbolic interface brings up a pop-up menu that allows you to view or edit the file.
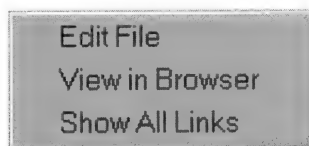
```
Edit File
View in Browser
Show All Links
```

☐ **Edit File:** launches the appropriate editor with the selected file (i.e., this command will launch the UDE editor if the selected file is a UDE definition list; the H.i.P. Editor if the file is a *.htm* or *.html* file, etc.)

☐ **View in Browser:** launches the H.i.P. Viewer with the selected file.

☐ **Show All Links:** recalculates the links for a file, as described on page 35, using the current file as the temporary 'home page'.

If you right-click on a broken link (a link displayed in red), the following menu item becomes active:

☐ **Fix Broken Link:** allows you to change the broken URL so that it refers to an existing file. The **Locate Correct Link** dialog box appears:
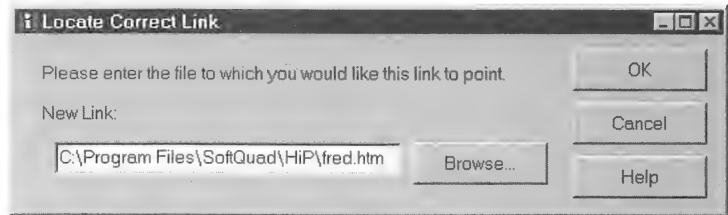
Enter the correct URL in the New Link text box, or click on the
Browse... button to choose a file.

> **Note** Entering a URL in the 'Fix Broken Link' dialog box
> alters the anchor element in the page referring to the bro-
> ken link

Tree display

The tree link display is a more familiar hierarchical display, but it shows
the links in the project, not the actual file structure. The home page for
the H.i.P. project is shown at the top of the tree display, and the files
linked to the home page are shown in descending hierarchical order. Lev-
els of hierarchy can be collapsed or expanded by clicking on the ⊟ or
⊞ icons to the left of each file icon. The icons give you some information
about what kind of file is being viewed.

- □ 📃 : an HTML or H.i.P. file either on the local filesystem or on the
  World Wide Web

- □ 🖼 : an image file.

- □ 🗋 : a non-image, non-HTML file.

- □ 🖳 : an external link to a newsgroup, FTP site, or other Internet
  entity.

- □ 🖴 : a link to a CGI script.

- □ ✉ : a *mailto* link (see page 289 for a discussion of mailto and its
  uses).

- □ 📄 : a link to an HTML file that points *upward* (towards the home
  page) in the link hierarchy.

□ ⊞ : a link to an HTML file that points *at the same level* of the link hierarchy.

□ ▤ : a link to an HTML file that points *downward* (away from the home page) in the link hierarchy.

□ ▧ , ▨ , ▧ : upward, at the same level, and downward link icons for images.

□ ▤ : (a icon with a red 'x' in the bottom right corner) indicates a broken link.

The first time a specific file is shown or referenced, the ▤ or ▧ icon is shown. The second time it is referenced, one of the upward, downward or same level link icons is shown. Because the tree link display shows the links of every file (in contrast to the cyberbolic display), selecting one file in the Project panel may highlight several icons in the tree link display, showing several different links to that file.

Viewing options in the tree display

Right-clicking on the background of the tree display brings up a pop-up menu that allows you to set viewing options:

Font...
Show Filenames
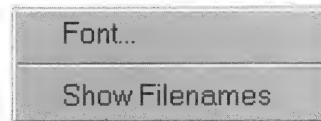
□ **Font:** Allows you to modify the font, font size, font style and font color used in the tree display. The same font dialog box appears as in the cyberbolic display; see page 37 for a description of the various options in this dialog box.

□ **Show Filenames / Show Titles:** toggles between using file names as file labels or using the content of the TITLE element or ALT attribute, if any. (Files without TITLE elements will always be shown with a file name and path, as will image files or other linked data files without an ALT attribute in their linking element.)

H.i.P. Pocket panel

The H.i.P. Pocket panel shows *H.i.P. Pockets*, which are user-defined sets of files in a project. You can show or hide the H.i.P. Pocket panel by choosing **H.i.P. Pocket** from the **View** menu. A check mark appears beside the menu item if the H.i.P. Pocket panel is shown. For more details on creating H.i.P. Pockets and using H.i.P. Pockets to manage files, see page 59.

Toolbar

The toolbar buttons provide access to the most important commands. *Tooltips*—short descriptions of what a toolbar button does—appear above the toolbar buttons if you move your mouse cursor over them.

You can show or hide the toolbar by choosing **Toolbar** from the **View** menu. You can switch between small icon toolbar buttons and large tool-bar buttons with labels by choosing **Toolbar Labels** from the **View** menu. A check mark appears beside **Toolbar Labels** if toolbar labels are selected.

☐   **New** *New*: launches the template wizard, guiding you through the creation of a new H.i.P. project. (See page 48.)

☐   **Open** *Open*: opens an existing H.i.P. project. (See page 48.)

☐   **Edit** *Edit*: opens the selected file in the appropriate editor; i.e., the Live TOC editor if the selected file is a TOC definition list; the H.i.P. Editor if the file is a H.i.P. or HTML file, etc. (See page 85 for details on the Live TOC editor; see page 79 for details on the UDE editor; see page 89 for details on the style editor; and see page 161 for details on the H.i.P. Editor.)

☐   **Browser** *Browser*: launches the H.i.P. Viewer—Netscape Navigator or Microsoft Internet Explorer and their associated H.i.P. plug-ins— with the selected file.

☐   **Properties** *Properties*: launches the **H.i.P. Properties Info** dialog box displaying information about the selected file. From this dialog box, you can create and modify many different aspects of H.i.P. docu-

ments, including user-defined extensions, live table of contents, and cascading style sheets. (See page 63).

☐ **🔍 Find** *Find*: lets you search for documents, and search and replace text across documents. (See page 119.)

☐ **↺ Remap** *Remap*: rebuilds the project displays, showing any changes that have been made to your project since the project displays were last created.

☐ **● Publish** *Publish*: lets you move your documents to the intranet server and reorganize your links. (See page 123.)

Menus

All commands can be chosen from the menus. The following list gives a brief description of the commands in each menu.

☐ **File** menu:

☐ Creating, opening, and importing H.i.P. projects (page 48, page 52)

☐ Creating and importing files (page 53)

☐ Launching the H.i.P. browser and appropriate editors for H.i.P. files

☐ Converting to and from H.i.P. format (page 56)

☐ Returning to previously-opened projects

☐ Exiting

☐ **Edit** menu:

☐ Copying, pasting, deleting and renaming files (page 57)

☐ Editing document properties (page 63)

☐ **View** menu:

☐ Moving between different link displays (page 33)

- ☐ Controlling toolbar and H.*i*.P. Pocket panel visibility (the previous page)
- ☐ Setting preferences (options) (the next page)

☐ **Search** menu:

- ☐ Finding and replacing text (page 119)
- ☐ Finding broken links, orphaned files, and other groups of H.*i*.P. files (page 60)

☐ **Tools** menu:

- ☐ Creating and editing user-defined extensions (page 79)
- ☐ Creating and editing live table of contents (page 85)
- ☐ Creating and editing style sheets (page 89)
- ☐ Publishing (page 123)
- ☐ Converting documents (page 55)
- ☐ Configuring a proxy server (page 131)
- ☐ Mapping a remote site (page 131)
- ☐ Rebuilding the link map (this page)

☐ **Help** menu:

- ☐ Accessing on-line help and information about the Information Manager.

Information Manager options

You can set the default editor and viewer for SoftQuad H.i.P. by choosing the Options... command from the View menu. The following dialog box appears:

```
┌─────────────────────────────────────────────────────────────────┐
│ i  H.i.P. Options                                              × │
│ ┌─────────────────────────────────────────────────────────────┐ │
│ │ │Programs│ Folders │                                          │ │
│ │                                                              │ │
│ │  HTML Editor:                                                │ │
│ │    │C:\Program Files\SoftQuad\HiP\hipedit.exe    │  Browse... │ │
│ │  HTML Browser:                                               │ │
│ │    │c:\Program Files\Netscape\Navigator\Program\ │  Browse... │ │
│ │  Style Editor:                                               │ │
│ │    │C:\Program Files\SoftQuad\HiP\cssedit.exe    │  Browse... │ │
│ │                                                              │ │
│ │                                                              │ │
│ │                                                              │ │
│ │                                                              │ │
│ │              OK          Cancel          Help               │ │
│ └─────────────────────────────────────────────────────────────┘ │
└─────────────────────────────────────────────────────────────────┘
```
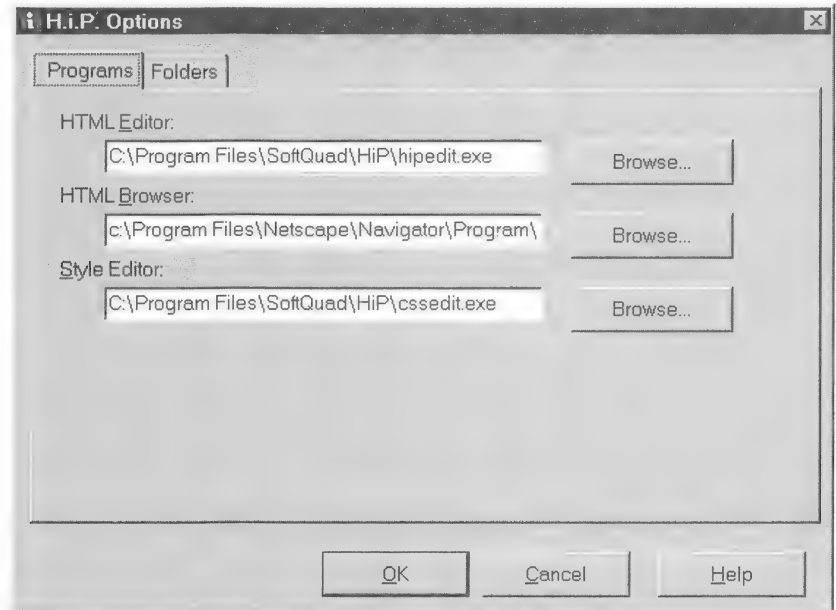
In this dialog box (the General tab), you can select an HTML editor and HTML browser for your documents by clicking on the [Browse...] button and selecting the appropriate file. When you install SoftQuad H.i.P., these options are set to the H.i.P. Editor and to the default browser that you selected during the install process.

Project management

One of the main purposes of the Information Manager is to create, import, and manage your H.*i*.P. projects. This section discusses how to open an existing project, create a new project, import a group of HTML documents into a project, or convert a group of word-processing documents to HTML format. This section also discusses 'H.*i*.P.-ifying' documents; that is, adding the markup to an HTML file that enables it to use special H.*i*.P. features.

The **Open Project...** command is used for opening existing projects, whereas the **Import Project...** command is used to convert a group of HTML documents into a H.*i*.P. project. If you're just starting to create projects with H.*i*.P., it may be easier to use **Import Project...** to import some HTML documents and start creating a project from that document base, rather than creating your H.*i*.P. documents from scratch. You can also convert word-processing documents and text documents into HTML documents using the **Convert Documents...** command.

This section also discusses how to manipulate individual H.*i*.P. files: you can move, copy, create and delete files from the Information Manager. As well, you can define groups of files (*H.i.P. Pockets*) based on various criteria, and perform file management operations on all the files in a H.*i*.P. Pocket.

Opening an existing project

When you click on the ⬛ **Open** toolbar button or choose **Open Project...** from the File menu, a dialog box appears, asking you to choose a H.*i*.P. project (*.hpp*) file, which are displayed with the ⬛ icon in the file chooser. Navigate to the H.*i*.P. project file that you want to open and select it. The H.*i*.P. project will be opened in the Information Manager.

The last four previously opened or imported projects are listed in the File menu, above the Exit command. Choosing a project file from that list will open it in the Information Manager.

Creating a H.i.P. project

When you click on the ⬛ **New** toolbar button or choose **New Project...** from the File menu, the SoftQuad H.*i*.P. template wizard is launched. This wizard guides you through the process of creating a new H.*i*.P. project. These categories can be customized by editing the New Project Template configuration file (see page 423). The default new project template is shown here:
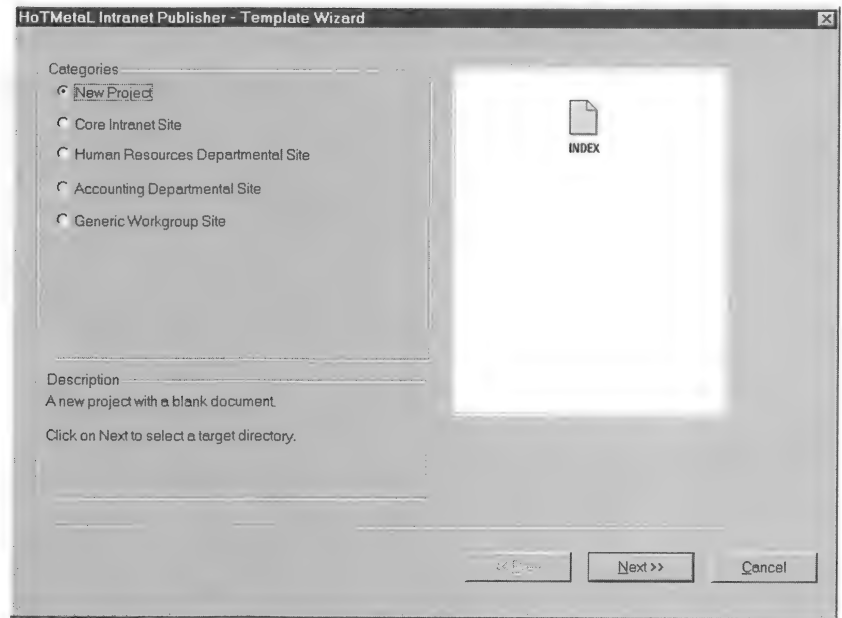
You are prompted to choose from the following options in the **Categories** section:

- New Project
- Core Intranet Site
- Human Resources Departmental Site
- Accounting Department Site
- Generic Workgroup Site

A description of the new project templates appears in the **Description** section, and a graphic of the template's file structure appears on the right hand side of the dialog box. Select whichever option you want by clicking on the radio button, then click on [Next>>] .

Certain project templates may require you to select an illustration style; the following dialog box appears:

A sample graphic of the template's appearance appears on the right hand side of the dialog box. Once you have selected which template you want to base your project on and click on [Next>>], a dialog box appears, asking you where you would like your project to be created. Select the appropriate folder, click on [Finished], and your H.i.P. project templates will be copied there.
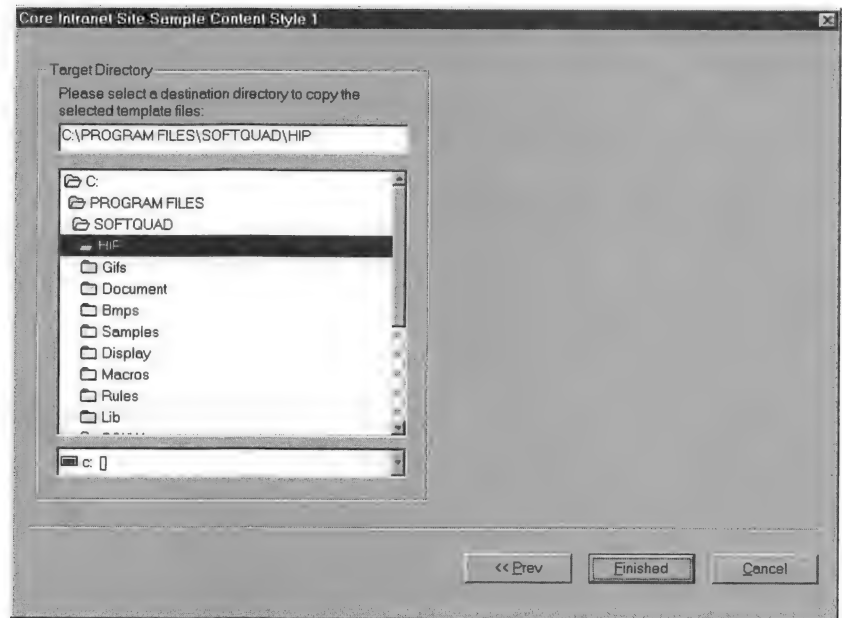
You can now begin to edit the H.i.P. template documents in order to insert your own content.

> **Note** The Information Manager is the only place where you can choose from a group of templates. (The H.i.P. Editor's 'New...' command brings up a single default template.)

Importing a project

Importing a project means converting an existing set of HTML files into a H.i.P. project. When you choose Import Project... from the File menu, a dialog box in which you specify a *home page* for the new H.i.P. project appears. The home page must be specified in order to build different displays of the project: the Information Manager examines the link structure and the file structure of the new H.i.P. project based on the specified home page. The home page is the starting page for the cyberbolic and tree link displays; it is generally the page where many links to other pages are found. This file may be an index page, a table of contents page, or a welcome page in a group of HTML documents, with a name such as *index.htm* or *main.html*.
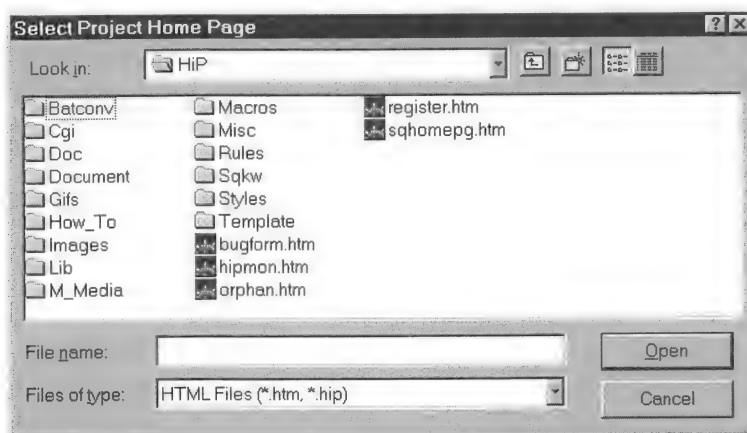
Once you have chosen the home page, click on Open to import the project and build the displays, or click on Cancel to cancel the import. (See page 33 for a description of how link displays work.)

Creating and importing H.i.P. files

You can create and import H.*i*.P. files from the Information Manager. To create a new file, choose the **New File...** command from the **File** menu. (You must have a H.*i*.P. project open.) The template chooser dialog box appears:
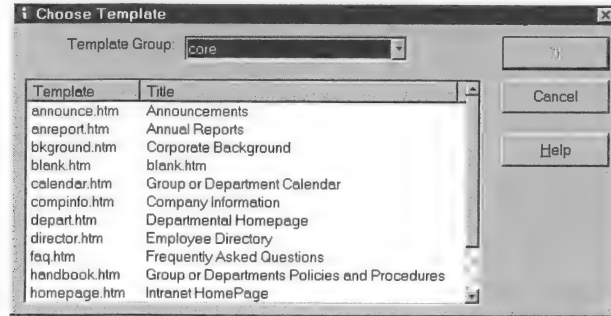
You can change to different sets of template files by selecting from the **Template group** pull-down list. A list of file names in that group will appear, along with the content of the file's TITLE element, if any. You can choose whatever template you feel is appropriate, including a blank template with no content.

The file will be copied into the root folder of the open project, along with all of its associated image files as well as other linked files (if any) and their directory structures. If any of the template files that you are copying have the same name as an existing file in the project, the **Existing File** dialog box appears:
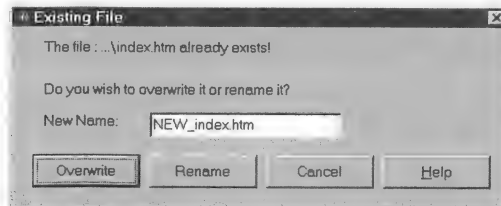
You can choose to overwrite the template files, or give them new names.

Once the new H.*i*.P. file and its associated files have been created, you can edit them, copy them, or perform other operations on them.

Importing an existing file

To import an existing HTML file, choose the Import File... command from the File menu. The following dialog box appears:
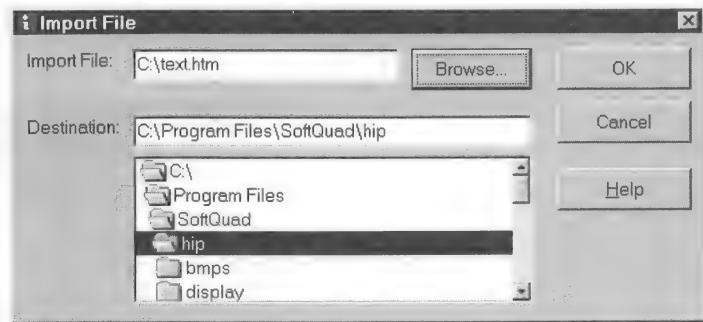
You must specify the file to be imported and the destination for that file. In the Import File text box, enter the path to the file that you would like to import. If you click on the [Browse...] button, a dialog box in which you can navigate to the file you wish to import will appear. When you have chosen the file, click on [Open] , and the path will be inserted into the Import File text box.

Choose the destination folder by either entering the path to that folder in the Destination text box or by selecting a folder from the folder view below the text box. When you have chosen both the file to import and its destination folder, click on [OK] in the Import File dialog box; the file will be copied to the specified folder. Any files that are linked to the imported file will also be copied to the project. If you choose a file that is linked to files in subfolders, the same file and folder structure will be re-created in the new location. You will be warned of any name conflicts with existing files and folders. The Information Manager will rebuild the displays to show the new H.i.P. file that you have imported.

> **Note** A file imported into your H.i.P. project might not have any links to other files in your project. You may need to edit one or more files already in the project and add links that point to the new file in order to make the file part of the link structure of the H.i.P. project.

Convert documents

To convert a group of word-processing documents or text documents into HTML format:

- Choose the **Convert Documents...** command from the **Tools** menu.

The **Select Files to Convert** dialog box appears:

```
Select Files To Convert                                    ? X
Look in:     generic                        ▼  ↱  ☑  ▦  ▦

  ☐ graphics       ▩ minutes.htm
  ☐ styles         ▩ policy.htm
  ☐ tocs           ▩ staff.htm
  ☐ udes           ▩ status.htm
  ▩ activity.htm
  ▩ calendar.htm
  ▣ epsilon.hpv
  ▩ faq.htm
  ▩ index.htm

File name:                                       Open

Files of type:  All Files (*.*)             ▼   Cancel
```

Select the files that you wish to convert in this dialog box. You can choose from several different file types: the SoftQuad H.i.P. batch converter can convert text files (*.txt*), Ami Pro files (*.sam*), rich text format files (*.rtf*), word files (*.doc*), and WordPerfect files (*.wpd*). For more details on which file formats can be converted by SoftQuad H.i.P., see page 407.

You can select multiple documents to convert by selecting files in this dialog box. Holding down the Ctrl key and clicking on files will allow you to select multiple file; holding down the Shift key and clicking will allow you to select a range of files. When you have made your selection, click on OK . The **Choose Folder** dialog box appears.

Choose Folder			? X

Folder name: HiP

Batconv	Macros	OK
bmps	Misc	Cancel
Doc	Rules	
Document	sample1	
Gifs	sample2	
How_To	Sqkw	
Images	Styles	
Lib	Template	
M_Media		
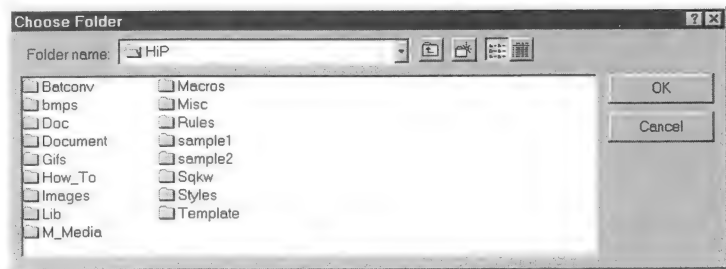
Select the folder in which you want the converted documents to reside. The batch conversion program converts the files you have specified and moves them to the folder you have selected. These files are now HTML documents, but you will need to edit them to create hyperlinks between the files (see page 161 for details on the H.i.P. Editor). You may also want to convert the documents to H.i.P. format, so that you can use H.i.P. features such as Live TOCs (see this page).

You can set options that determine how formatted text will be converted to HTML. Choose **Document Conversion Options...** from the **Tools** menu to bring up a dialog box where the conversion options can be set. See page 407 for a detailed discussion of the various conversion options and their effects.

Converting between HTML and H.i.P. format

While you can use HTML documents in your H.i.P. projects, viewing a non-H.i.P. HTML document will not give you access to important features of SoftQuad H.i.P. such as live tables of contents, views, annotations, popups, and one-to-many links. (See page 187 for more details on these H.i.P. Editor enhancements.) To convert your documents from HTML to H.i.P. format:

- Select one or more documents in the Project panel and choose **Convert to H.i.P.** from the **File** menu.

Or:

- Right-click on a document or selected documents in the Project panel and choose **Convert to H.i.P.** from the pop-up menu that appears.

The selected file is 'H.*i*.P.-ified': special HTML markup is added to the file. This special markup consists of:

- A script element in the document's HEAD element, containing a JavaScript program.
- A FRAMESET element that defines the frames displayed in the H.*i*.P. Viewer.
- A NOFRAMES element that contains the BODY of the original document.
- A link to an auxiliary file in the same folder called *epsilon.hpv*, which makes the H.*i*.P. Viewer treat the document as a H.*i*.P. file.

The icon used to represent this file in the Project panel changes from the HTML document icon to the H.*i*.P. document icon, as does the color of the link in the cyberbolic view (from black to grey).

To 'de-H.*i*.P.-ify' your document (remove the special H.*i*.P. markup):

■ Select one or more documents in the Project panel and choose **Convert from H.i.P.** from the **File** menu.

Or:

■ Right-click on the document in the Project panel and choose **Convert from H.i.P.** from the pop-up menu that appears.

Moving, copying, deleting and renaming files

In the Project panel, you can move, copy, and delete files much as you would in the Windows Explorer or Windows File Manager, by dragging and dropping files and folders or selecting files and folders and performing different operations on them. However, the Information Manager keeps track of hyperlinks between files, and will modify the links as appropriate when you move or rename a file.

The Project panel shows the actual structure of the files in your H.*i*.P. project, so if you move or delete a file, the actual file is moved or deleted (moved to the Recycle Bin under Windows 95 or Windows NT 4.0), and not just deleted from the link structure. In other words, be careful!

☐ To move one or more files, select the files and drag them to their new location. The Project display will be automatically updated to show the new location of the files.

When you move a file, all of the hypertext links that refer to that file in your H.i.P. project will be updated to refer to that file's new location automatically by the Information Manager. In other words, you need not edit each individual file that is linked to the moved file and update URLs based on the file's location; the Information Manager will do it for you.

> **Note** When you move a file, the links within the file that refer to other documents are NOT updated; in other words, moving the file will correctly change the files that refer to the moved file, but may create broken links within that moved file.

☐ To copy one or more files, do the following:

- Select the files and then either select **Copy** from the **Edit** menu or right-click on the selection and choose **Copy** from the pop-up menu that appears.

- Move your mouse cursor to the location in the project display where you want the files copied.

- Select **Paste** from the **Edit** menu or right-click again and select **Paste** from the pop-up menu that appears.

The project display and link display will be updated to reflect the new file location.

☐ To delete one or more files, select the files and then either right-click on the selection and choose **Delete** from the pop-up menu that appears, or select **Delete** from the **Edit** menu. A dialog box will appear, giving you a chance to cancel this deletion. The project display and link display will be updated to reflect the file deletion.

> **Note** Deleting a file can create broken links in your H.i.P. project; use the link displays to check the link structure of your project.

☐ You can rename a file in one of three ways:

■ Right-click on the file, and choose **Rename** from the pop-up menu.

■ Select the file and choose **Rename** from the **Edit** menu.

■ Click once on the file to select it, and then click a second time on the file.

The file name will become editable.

■ Enter a new name for the file.

The change takes effect when you click outside the filename. All links to this file in the current project will be updated automatically.

Using H.i.P. Pockets to manage files

H.i.P. Pockets—user-defined sets of files—are useful for managing projects. You can create H.i.P. Pockets based on a variety of criteria, such as search results, files with broken links, orphaned files (files without any links to them), etc. See the next page for details. Once you have created a H.i.P. Pocket with a certain type of file in it, you can then delete, copy, or rename these files all together, rather than trying to find each and every file in the project display.

H.i.P. Pockets are saved between Information Manager sessions. Once you have created a H.i.P. Pocket, it will remain in the H.i.P. Pocket panel until deleted, even if you close and reopen the Information Manager. You can show or hide the files in a H.i.P. Pocket by clicking on the ▥ icon to the left of the H.i.P. Pocket.

New H.i.P. Pockets are created by Information Manager commands that reside under the **Search** menu (see the next page for a list and description. Search results can also be moved into a H.i.P. Pocket (see page 119 for more details on searches).

To create a new, empty H.i.P. Pocket:

■ Right-click on the H.i.P. Pocket panel and choose **New H.i.P. Pocket** from the pop-up menu that appears.

Once you have created a new, empty H.*i*.P. Pocket, you can drag selected files into it from the Project display. You can also rename H.*i*.P. Pockets:

■ Click on a H.*i*.P. Pocket once to select it, and then click a second time. The name of the H.*i*.P. Pocket will become editable.

■ Enter a new name. When you click outside the H.*i*.P. Pocket, the name change takes effect.

> **Note** If you drag a folder into a H.i.P. Pocket, the H.i.P. Pocket will contain only the files that are in the folder, and not the folder itself, any subfolders, or files within subfolders.

To delete files from a H.*i*.P. Pocket :

■ Select the files, right-click on the selection and choose **Delete File** from the pop-up menu that appears.

To delete a H.*i*.P. Pocket:

■ Right-click on the H.*i*.P. Pocket and choose **Delete H.i.P. Pocket** from the pop-up menu that appears.

These deletions do not affect the actual files in your H.*i*.P. project, just the representation of the files in the H.*i*.P. Pocket.

Finding broken links, orphan files, and links to this file

There are three commands that are extremely useful for file management. These commands let you find files with broken links (i.e., files with links that are not pointing to a file), orphaned files (i.e., files that do not have any links pointing to them, files that are not part of the link structure of the project), and files that point to a particular file.

To create a H.*i*.P. Pocket containing all the files that have broken links in a project:

■ Choose the **Find Broken Links** command in the **Search** menu.

A status dialog box appears as the Information Manager searches the project. A H.*i*.P. Pocket called '**Files with Broken Links**' will be created at the end of this search.

To find orphan files in a H.*i*.P. project, automatically creating a new H.*i*.P. Pocket:

- Choose **Find Orphan Files** from the **Search** menu.

A H.*i*.P. Pocket called **Orphaned Files** will be created.

To find files that point to a specific file in a H.*i*.P. project, automatically creating a new H.*i*.P. Pocket:

- Select a file in the Link or Project panels.
- Choose **Find Links To This File** from the **Search** menu.

A H.*i*.P. Pocket called **Files that link to [filename]** (where *filename* is the filename you selected) will be created.

Document Properties

H.i.P. documents have special properties that allow them to be viewed and manipulated in interesting ways: user-defined HTML extensions, different views of the document, and tables of contents are all implemented by means of attached auxiliary files. As well, H.i.P. documents contain special 'meta' information that, among other things, is used by the H.i.P. Monitor to keep track of the files and inform users of changes. These special properties—attached files and special document information—can be viewed and modified from the **Document Properties** dialog box.

The **Document Properties** dialog lets you create and modify many different properties of your H.i.P. documents. There are two classes of information that you can set in the **Document Properties** dialog:

☐ You can configure SoftQuad H.i.P. to update and publish pages according to information that you set in the **Document Properties** dialog. The H.i.P. Monitor, which helps you to manage your intranet by monitoring pages and sites for specified events, keeps track of these pieces of information. See page 375 for more details on the H.i.P. Monitor.

☐ You can link to files that define user-defined extensions, cascading style sheets, live tables of contents, and other important H.i.P. files that are used to expand the capabilities of your projects.

The H.i.P. Document Properties dialog is divided into four tabbed sections: General, Effective Date, UDEs and Properties. Click on a tab to display that section of the dialog. The following list describes the tabbed sections and their contents. More information on each section of the H.i.P. Document Info dialog can be found in the sections that follow.

☐ General tab:

   – Document section: allows the user to set the document title, description, author and company information.

   – File Dates section: shows the creation date and modification date of the H.i.P. document.

See page 65 for more details on the General section of the H.i.P. Document Properties dialog.

☐ Effective Date tab: allows the user to set information used by the SoftQuad H.i.P. Monitor when publishing documents.

   – Effective Date section: sets the date when the document is to become effective and the file name to be used on that effective date.

   – Expiry section: sets the date when the document is to expire.

See page 66 for more details on the Effective Date section of the H.i.P. Document Info dialog box. See page 375 for more details on the H.i.P. Monitor.

☐ User-defined extensions tab: points to the user-defined extensions (UDE) file, which defines all of the H.i.P. extensions that you have created. See page 69 for more details on the UDEs section of the H.i.P. Document Properties dialog, and see page 79 for more details on UDES.

☐ Properties tab: allows the user to load, delete, and edit style sheets, Live TOCs, topics, and custom METAS; that is, document meta-information. See page 71 for more details on the Properties section of the H.i.P. Document Properties dialog box. See page 89 for more details on style sheets and page 85 for more details on Live TOCs.

General

When you click on the **General** tab in the H.i.P. **Document Properties** dialog box, the following dialog box appears:

Document attributes

From this dialog, you can enter the following document attributes:

- **Title:** this is the title of the document, which will be shown in the Link panel (see page 33). Anything entered into this text box will be saved in the **TITLE** element inside the **HEAD** of your H.i.P. document.

- **Description:** Enter a brief description of the document in this text box. This information is saved in a **META** element inside the **HEAD** of the H.i.P. document.

– **Author:** You can use this text box for listing the document authors. This information is saved in a META element inside the HEAD of the H.i.P. document, and allows users to subscribe to your pages based on who created them.

– **Company:** You can use this text box for listing the company, if any, associated with the document or document authors. This information is saved in a META element inside the HEAD of the H.i.P. document.

File dates

The following file information is saved automatically when you create or modify a H.i.P. document. It is in a format that can be read by the H.i.P. monitor: you can change it if you like, but it must be in YYYYMMDD format; i.e., year-month-day (for example, 19970401 would define April 1, 1997). Using any other date format may make the information unusable by the H.i.P. Monitor.

– **Date Created:** the date and time (according to the local system clock) when the file was created. This information is saved in a META element.

– **Last Modified:** the date and time (according to the local system clock) when the file was changed. This information is saved in a META element.

Effective Date

When you click on the **Effective Date** tab in the H.i.P. **Document Properties** dialog box, the following dialog box appears:

The information that you enter in the **Effective Date** section of the **Document Properties** dialog box is used by the H.i.P. Monitor to determine when the document becomes *effective*; that is, when the information in the documents is active, and when those documents should *expire*. The following pieces of information are set in the **Effective Date** section:

☐ **Date**: the date that the page becomes effective. The H.i.P. Monitor will scan your page and change its name to the name specified in the **To URL** text box on this date. The date must be in YYYYMMDD format; if the date is entered in a format that cannot be parsed, a warning dialog will appear. The H.i.P. Monitor will notify the H.i.P. Monitor administrator on this date that the page has become effective. See page 375 for more details on the H.i.P. Monitor.

☐ **Comment:** a statement about the document becoming effective; e.g., 'new weekly accounting report'. This comment will be part of the notification message sent by the H.*i*.P. Monitor.

☐ **To URL:** the filename or URL of the page once it become effective. The H.*i*.P. Monitor will copy the file from the old name to the new name, overwriting any existing file with that name.

Here's an example of how the effective date might work. Here, we're replacing an old report by a newer version. Let's say the document was published to the server as *newdoc.htm*. The **Date** text box is specified as 19970601; that is, June 1, 1997. The **Comment** is specified as 'monthly maintenance report'. The **To URL** text box is specified as *mmreport.htm*. Since this report is monthly, there is already an *mmreport.htm* file on the system (for the month of May), and on June 1, 1997, the H.*i*.P. Monitor will change the filename of *newdoc.htm* to *mmreport.htm*, overwriting the previous file, and making the new information effective. The H.*i*.P. Monitor will also send the H.*i*.P. Monitor administrator a notification message, saying that the information has become effective, and incorporating the information in the **Comment** text box; here, that the report was the monthly maintenance report.

The following pieces of information are set in the **Expiry** section:

☐ **Date:** the date that the file should no longer be available on the intranet, (in YYYYMMDD format; if the date is entered in a format that cannot be parsed, a warning dialog will appear). The H.*i*.P. Monitor will notify the H.*i*.P. Monitor administrator on this date that the file has expired, so he or she can make a decision about whether to keep the file on the system.

☐ **Comment:** a statement about the expiry; e.g., 'weekly accounting figures have been updated'. This information will be mailed to the H.*i*.P. Monitor administrator on the expiry date.

All of these pieces of information are saved in **META** elements.

User-defined extensions

User-defined extensions (UDEs) are a way of creating your own, special elements based on existing HTML elements for use in a H.*i*.P. project. See page 79 for an detailed discussion of UDEs and how to use them. You can create, modify, or link a UDE file to your document via the **Document Properties** dialog box. To work with UDEs, click on the **UDEs** tab. The following dialog box appears:
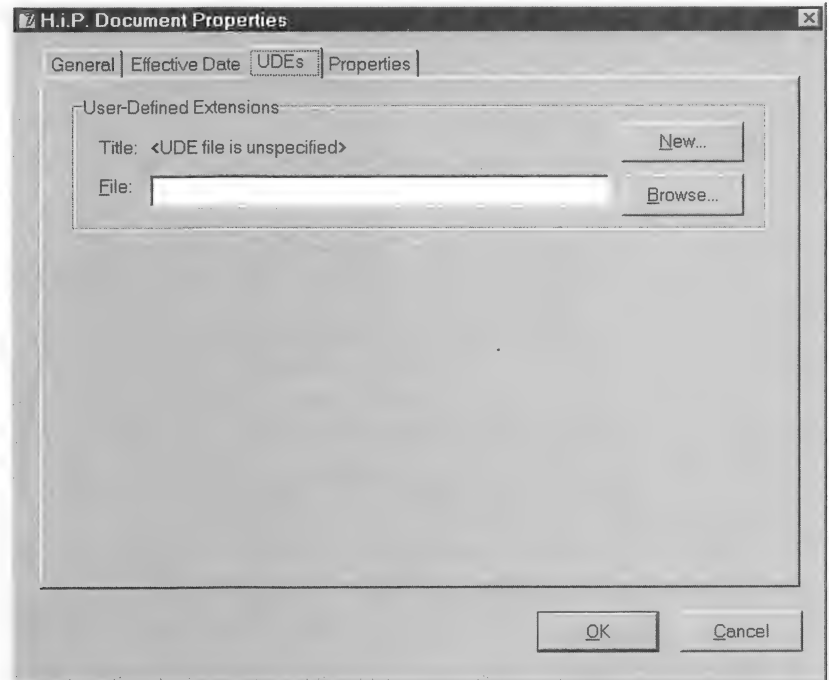
To select a UDE file:

- In the **File** text box, enter the filename of the UDE file that you would like to link to your H.i.P. document. If you click on the [Browse...] button, the **Browse for UDE file** dialog box appears:
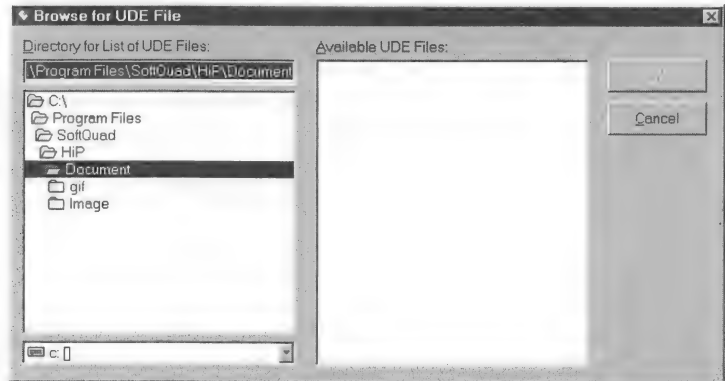
Navigate to the folder where your UDE file resides, using the folder chooser on the left side of this dialog box. The titles of the UDE files in the specified folder will be shown in the **Available UDE file** list. Select the UDE file and click on [OK] .

The path to the UDE file that you have selected will be shown in the **File** text box.

If there is no UDE file specified in the text box, you can create a UDE file and link it to your document:

- Click on the [New...] button. (This button changes between [New...] and [Edit...] depending on whether or not a UDE file is specified.) The UDE editor will be launched. See page 79 for details on the UDE editor.

Once you have saved the new UDE file, the location will be shown in the user-defined extensions **File** text box.

To modify an existing UDE file, click on the [Edit...] button. (This button changes between [New...] and [Edit...] depending on whether or not there is a specified UDE file.) The UDE editor will be launched using the specified UDE file. See page 79 for details on the UDE editor.

The location of the UDE file is saved in a LINK element in your H.*i*.P. document. The UDE file that you have linked to your H.*i*.P. document will be shown as a linked file in both the cyberbolic display (if Full View is chosen) and the tree link display. You may need to remap the project (by clicking on the $\begin{array}{c} \circlearrowright \\ \text{Remap} \end{array}$ toolbar button or choosing Rebuild Link Map from the Tools menu) in order to see the linked UDE file.

Properties

The Properties section of the H.i.P. Document Properties dialog shows the files linked to your H.*i*.P. document in a graphical tree interface. Click on the ⊞ or on the document title to expand the tree.
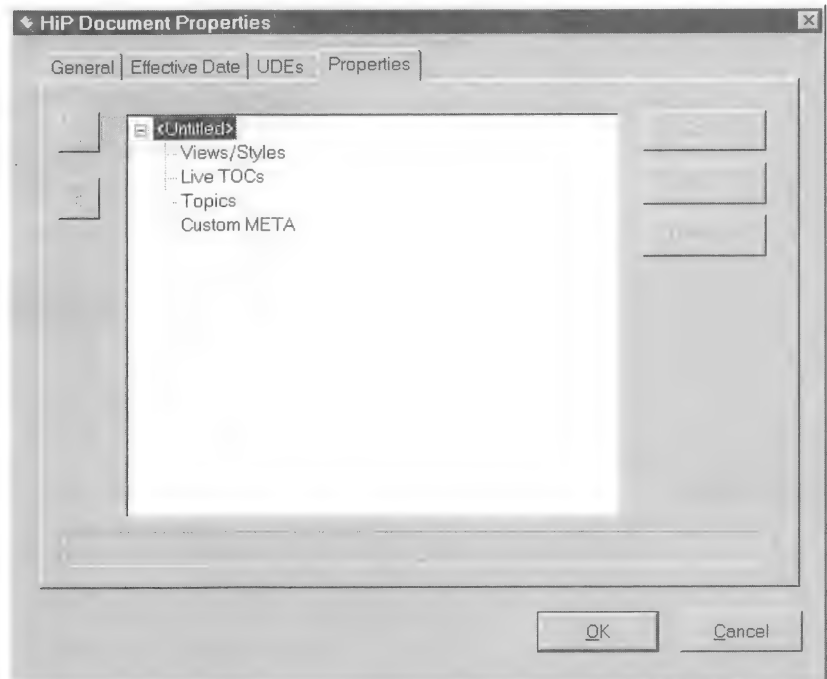
There are four types of information that can be accessed from this section of the Document properties dialog: Style Sheets, Live TOCs, Topics, and Custom Meta.

An important characteristic of style sheets and Live TOCs is that you can have several such files attached to a document, and the ordering makes a difference to how the H.*i*.P. Viewer displays the document. For example, the first Live TOC and style sheet attached are the defaults and will be used when the file is first displayed in the H.*i*.P. Viewer. If a user wants to use a non-default Live TOC or style sheet, it will have to be chosen from a pop-up menu in the H.*i*.P. Viewer. (See page 144 for more details about selecting Live TOCs in the H.*i*.P. Viewer. See page 151 for details about selecting style sheets in the Viewer.) Once you have attached Live TOCs or style sheets to your document, you can reorder them by selecting them in the Properties list and using the arrow buttons ⬆ and ⬇ to change their position in the tree, as in the following example:
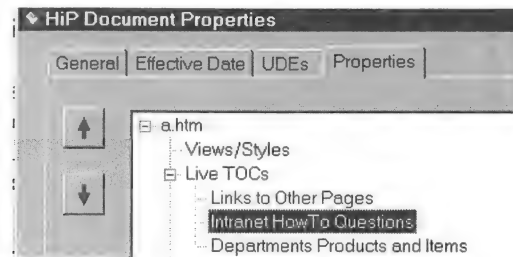
You can also remove items from the Properties dialog by selecting them and clicking on the Remove button.

Style sheets

SoftQuad H.*i*.P. lets you define your own ways of viewing H.*i*.P. documents. Rather than having the appearance of your document determined exclusively by the browser, you can use cascading style sheets to specify the appearance of elements, categories of elements, specific instances of elements, and UDEs. See page 89 for an extensive discussion of style sheets and style properties, including hiding and viewing sections of a document.

You can search for, add, create, and edit style sheets in the Properties section of the H.i.P. Document Properties dialog box.

To add an existing style sheet:

- Double-click on the **Style Sheets** item, or select it and click on the [Add...] button.

The **Add Style Sheets** dialog box appears:
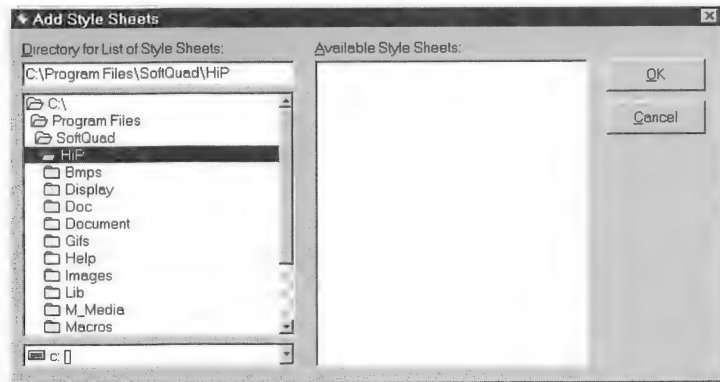
To change folders, navigate to the folder where your style sheets reside using the folder lists on the left side of this dialog box. The titles of the style sheets in the selected folder (which is not necessarily the current project folder) are listed in the **Available Style Sheets** list. To link one or more style sheets to your document, select the style sheet(s) and click on [OK] . The selected items are inserted into the style sheet tree in the H.i.P. **Document Properties** dialog box.

To create a style sheet, select the **Style Sheet** item from the properties tree in the H.i.P. **Document Properties** dialog box and click on the [New...] button. This brings up the SoftQuad H.i.P. CSS editor (see page 89). The style sheet that you create and save will be linked to the current document.

To edit a style sheet, select it in the style sheet tree of the H.i.P. **Document Properties** dialog box and click on [Edit] . The SoftQuad H.i.P. CSS editor will be launched with the selected style sheet (see page 89).

To remove the linked style sheet, select the style sheet from the **Style Sheet** tree of the H.i.P. **Document Properties** dialog box and click on the [Remove] button. This removes the link to the style sheet, and not the style sheet itself.

Live TOCs

SoftQuad H.i.P. lets you define live (dynamic) tables of contents (Live TOCs) for your H.i.P. documents. These tables of contents are seen in the H.i.P. Viewer. In order to create a custom Live TOC for your H.i.P. document, you must link your H.i.P. document to a Live TOC file. See page 85 for a discussion of Live TOCs.

You can search for, add, create, and edit Live TOCs in the **Properties** section of the **H.i.P. Document Properties** dialog box. To add an existing Live TOC file:

- Double-click on the **Live TOCs** item, or select it and click on the [Add...] button.

The **Add Live TOC** dialog box appears:
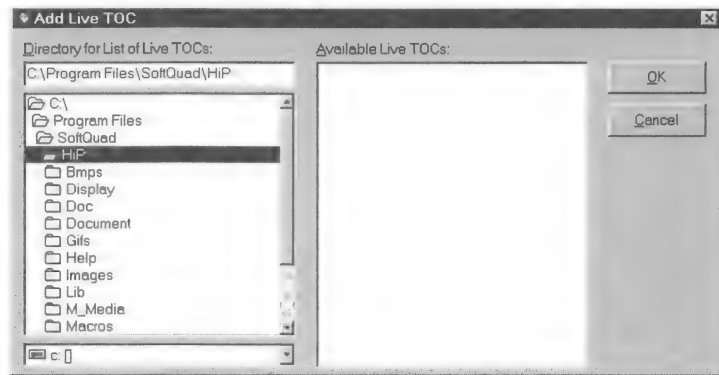
To change folders, navigate to the folder where your Live TOCs reside using the folder lists on the left side of this dialog box. The titles of the Live TOCs in the selected folder (which is not necessarily the current project folder) are listed in the **Available Live TOCs** list. To link one or more Live TOCs to your document, select the Live TOC(s) and click on [OK]. The selected items are inserted into the Live TOC tree in the **H.i.P. Document Properties** dialog box.

To create a Live TOC, select the **Live TOC** item from the properties tree in the **H.i.P. Document Properties** dialog box and click on the [New...] button. This brings up the SoftQuad H.i.P. Live TOC editor (see page 85). The Live TOC that you create and save will be linked to the current document.

To edit a Live TOC, select it in the Live TOC tree of the H.i.P. Document Properties dialog box and click on Edit... . The SoftQuad H.i.P. Live TOC editor will be launched with the selected Live TOC (see page 85).

To remove a linked Live TOC, select it in the Live TOC tree of the H.i.P. Document Properties dialog box and click on the Remove button.

Topics

Topics are keywords or phrases that are saved in META elements inside the HEAD of a H.i.P. document. They can be used to define searches in a H.i.P. project; i.e., you can restrict your search to documents with a particular topic. The H.i.P. Monitor (see page 375) can also detect when documents are published and create email notifications based on topics.

A group of topics that may apply to several documents can be saved in a *topic file* (*.hpo* file), which is a file containing a list of topics. In addition to adding topics to your document directly, you can select topics from the topic file to add to your document by selecting a topic file from the Add Topics dialog box. As well, you can create and edit topic files by invoking the Topic editor (see the next page).

To add topics to your document, double-click on the Topics item in the Properties section of the H.i.P. Document Properties dialog, or select the Topics item and click on the Add... button. The Add Topics dialog box appears:
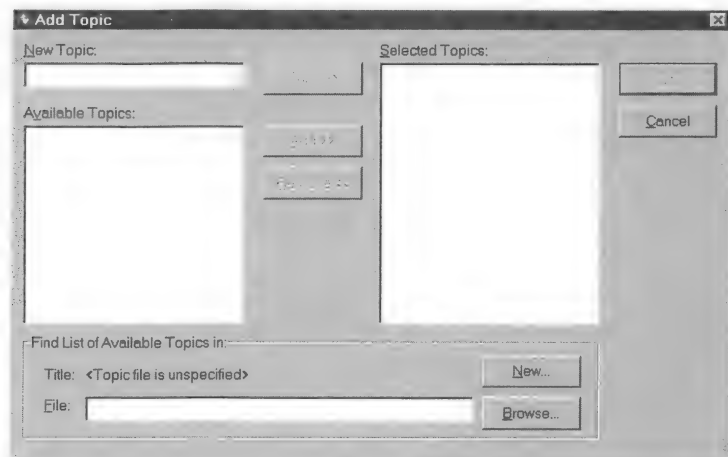
From the **Add Topic** dialog box, there are two ways to add topics to your file:

– You can add custom topics to H.i.P. documents by entering text in the **New Topic** text box. Then click on the [Copy>>] button to move what you have entered into the **Selected Topics** list.

  To remove topics from **Selected Topics** list, select them and click on the [<<Remove] button.

– A group of topics that may apply to several documents can be saved in a topic file, and then loaded into the **Add Topics** dialog box.

  ▪ Click on the [Browse...] button to select the folder where your topic file resides.

  ▪ Choose one or more topic files.

The file will be read, and the topics within it are listed in the **Available Topics** list. At this point, the topics are just loaded into the **Add Topics** dialog box. To move items into the **Selected Topics** list:

▪ Select items from the **Available Topic** list and click on the [Add>>] button. (See the next page for information on creating a topic file.)

Once you have added the topics you want to be attached to your document in the **Selected Topics** list, click on the [OK] button in the **Add Topics** dialog box to return you to the H.i.P. **Document Properties** dialog box. The topics that you have linked to this document will be listed under the **Topics** item in the **Properties** tree. To remove a linked topic, select it and click on the [Remove] button.

Creating a topic file

To create a topic file:

▪ Select the **Topics** item from the properties tree in the **H.i.P. Document Properties** dialog box and click on the [New...] button.

Or:

▪ Click on the [New...] button in the **Find list of available topics** section of the **Add Topic** dialog box.

This brings up the SoftQuad H.*i*.P. Topic editor:
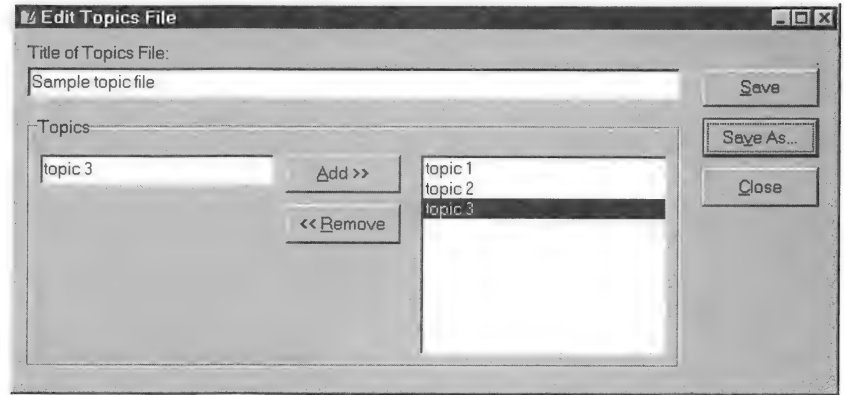
You can enter a title for the topic file in the text box provided. Enter the individual topics in the Topics text box, and click on the [Add>>] button to move the topics into the list. To remove the topics from the list, select them from the list and click on the [<<Remove] button. Click on the [Save] or [Save As...] buttons to save the current file, and click on the [Close] button to return to the Add Topic editor or Document Properties dialog box.

> **Note** Once you have created the topic file, you still need to select the topics in that file which are to be linked to the current document, which means adding topics in the 'Add Topic' dialog box.

If you would like to edit a topic file, select a topic file using the [Browse...] button in the Add Topic dialog box, and then click on the [Edit...] button. The Topic editor will be launched with the selected topic file.

Custom Metas

Meta data is information that is read by a Web or intranet server about a document. It could be indexing information for search purposes, document creation and expiry information, etc. Meta data is contained within META tags in the HEAD element.

Custom Metas allows you to create META elements that are not defined by the General or Effective Dates tabs in the H.i.P. Document Properties dialog. To add custom meta information:

- Double-click on the Custom Meta item in the properties tree, or select the Custom Meta item and click on the ⎡ Add... ⎤ button.

The following dialog box appears:

Add Custom META Data	×
Name: [ ]	OK
Content: [ ]	Cancel
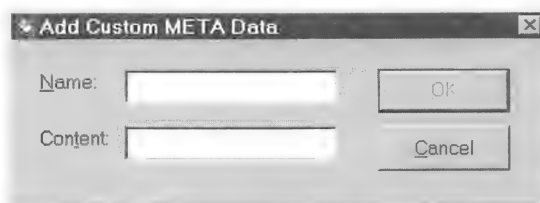
- Enter a Name for your Custom meta information (e.g., Version Number).
- Enter any content you like.
- Click on ⎡ OK ⎤ .

Custom META data is application- and user-specific. SoftQuad H.i.P. lets you read and enter it, but doesn't use it in any other way. However, other programs that read HTML pages may use this information.

User-defined extensions (UDEs)

User-defined extensions (UDEs) are one of SoftQuad H.i.P.'s most powerful features. UDEs allow you to extend HTML by creating your own elements for use in H.i.P. documents. In combination with the searching and Live TOC features of SoftQuad H.i.P., UDEs provide you with a new and powerful way to customize and expand the capabilities of the information that you publish on your intranet.

You can use UDEs to add custom information to your H.i.P. documents and projects. For example, rather than having the identification numbers of your company's products within, say, **B** (bold) tags, where they can't be distinguished from any other text in **B** tags, you could create a new UDE called **ProductNum**. This new element would allow you to have a special viewing style for **ProductNum**—show all text within **ProductNum** tags in a large, bold, red font, for example—or show or hide it in different views: perhaps the sales team would need to see a list of the identification numbers for the products, but the accounting team, who aren't filling out sales forms, need not. As well, you can create a Live TOC definition file that refers to this UDE and link the Live TOC file to a H.i.P. document. A table of contents will be created created in the H.i.P. Viewer when you view the H.i.P. document that refers specifically to the **ProductNum** tags.

The most important thing to understand about UDEs is that they are *based on* HTML elements. That is, the UDEs that you create have the same type of content and appear in the same places in the document as the HTML elements that they are based on. For example, suppose you create a UDE called **SecHead** (Section Header), based on **H1** (level one heading).

Though it would appear as **SecHead** in the H.*i*.P. Editor and all the other components of SoftQuad H.*i*.P., it can only appear in the same places in the document as **H1**. You could not insert a **SecHead** element inside a **P** (paragraph) element, just as you can't put an **H1** inside a **P** element in HTML.

Launching the UDE editor

You can launch the UDE editor in several different ways. To edit an existing UDE definition file:

- Right-click on a UDE file in either the Project panel or the Link panel and choose **Edit File** or **Launch Editor** from the pop-up menu that appears. The UDE editor will be launched using the specified UDE file.

You can create a new UDE file or edit an existing one in the following ways:

- Choose **User Defined Extensions...** from the **Tools** menu. A dialog box in which you will be prompted to choose a UDE (*.hpe*) file will appear. Navigate to the *.hpe* file and select it, or, if you would like to create a new UDE file, enter a new file name in the **File Name** text box.

- Select a H.*i*.P. document and choose the **Document Properties,...** command from the **Edit** menu. Click on the **UDEs** tab. If a UDE file has been linked to that H.*i*.P. document, clicking on the [Edit...] button will launch the UDE editor with that file.

  If there is no UDE file linked to the H.*i*.P. document, the text **<UDE file is unspecified>** will appear in the dialog box. Clicking on the [Browse...] button will open a dialog box where you can select an *.hpe* file, or if you would like to create a new UDE file, click on the [New...] button, which launches the UDE editor. (See page 63 for more details on the **Document Properties** dialog box.)

Creating and editing UDEs

The **UDE Editor** dialog box appears:
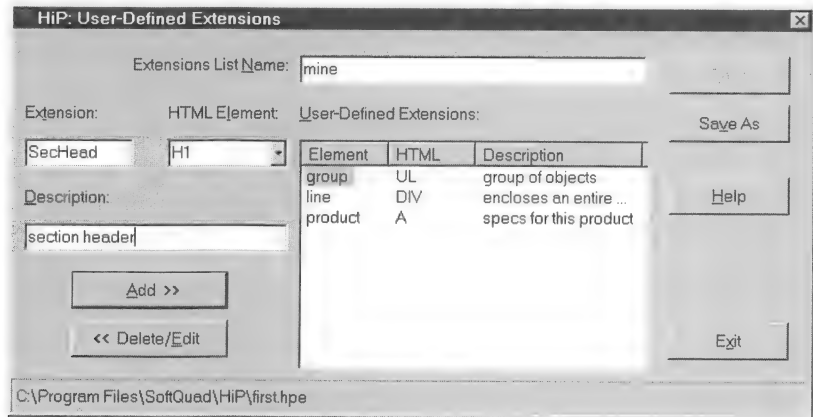
You should enter a descriptive name for the set of UDEs that you are creating in the **Extensions List Name** text box. This can be useful to give more information on exactly what kind of UDE definition list you are creating; for example, `Inventory list` for new UDEs used to create a document for inventory control, `Memo` for UDEs used in inter-office communication, etc. The name is used to identify UDE files in the **Browse for UDE** file dialog, and is also used as the label of the UDE file in the cyberbolic display and the tree link display.

To create a new UDE:

- Enter a name for the UDE in the **Extension** text box. The name must be unique in this UDE definition list, and must start with a letter, followed by letters, numbers, and dashes ('-').

  We suggest using mixed case names like **SecHead** when you are creating UDEs, in order to differentiate them from the basic HTML elements, which do not use mixed case. The H.i.P. Editor will preserve the case of the names that you enter.

Note Though the H.i.P. Editor will preserve case when displaying UDE names, the UDE names are interpreted in a case-insensitive fashion. That is, you should not create two UDEs that differ only in case (e.g., 'ProdNum' and 'PRODNUM'); this will cause errors.

- Select the HTML element that you want to base the UDE on from the **HTML Element** pull-down list, or enter the name of any HTML element in the text box.

- Enter a description for this UDE in the **Description** text box. The description will appear in the **Insert Element** and **Change Element** dialog boxes in the H.i.P. Editor (see page 261 and page 264).

- Once you have filled in these text boxes, click on the ⌧ Add>> ⌧ button to place this definition into the UDE list.

To edit an existing definition:

- Select a definition by clicking on its **Element** field, and then click on the ⌧ <<Delete/Edit ⌧ button. The selected UDE definition will 'jump out' of the list so that it can be edited.

- You can change the name of the UDE, the HTML element that it is based on, and its description. Click on the ⌧ Add>> ⌧ button again to move the changed UDE back into the definition list.

To delete the current UDE definition, click on the ⌧ <<Delete/Edit ⌧ button a second time.

When you have completed your modifications, click on the ⌧ Save ⌧ button to save your UDE definition list, or click on ⌧ Save As... ⌧ to save the file under a different name. A dialog box where you can choose a different file name or location for your *.hpe* file will appear. Click on ⌧ Close ⌧ to discard any changes you have made (if you have made unsaved changes, the Information Manager will inform you of this).

For more details on linking UDE definition lists to particular H.i.P. documents, see page 65. For a tutorial on using UDEs in your H.i.P. documents, see the *Adding to the HTML tag set...* section in the *Using SoftQuad H.i.P.* manual.

Technical note UDEs are HTML elements whose CLASS attribute has a value. The H.i.P. Editor causes the HTML element with the CLASS attribute appear as a UDE: for example, an H1 element with its CLASS attribute set to 'SecHead' would be seen as a 'SecHead' UDE in the H.i.P. Editor.

Live tables of contents (Live TOCs)

Live TOCs are dynamic (that is, *live*) tables of contents that you can define for your H.i.P. documents. To define a Live TOC, you specify the set of HTML elements, and possibly UDEs, that you want to appear in the Live TOC. When you view a document that has a Live TOC file linked to it, a table of contents is created from your selection of elements. The Live TOC is generated at the time that the file is viewed. The Live TOC appears in the H.i.P. Viewer's table of contents panel and gives you an overview of the document's structure and contents. You can have many Live TOCs linked to your document and move between them to see different aspects of your document's structure. Because the entries in the Live TOC panel are linked to the corresponding elements in the document panel (i.e., they are 'hot text'), you can navigate through the document by clicking in the Live TOC. See page 144 for more details on viewing and manipulating Live TOCs in your H.i.P. Viewer.

Launching the Live TOC editor

You can launch the Live TOC editor in several different ways.

■ Right-click on a Live TOC file in either the Project panel or the Link panel and choose **Edit File** from the pop-up menu that appears. The Live TOC editor will be launched using the specified Live TOC file.

Or:

■ Choose **Live TOC...** from the **Tools** menu.

A dialog box in which you will be prompted to choose a Live TOC (*.hpl*) file will appear. Navigate to where the *.hpl* file is located and select it, or, if you would like to create a new Live TOC file, enter a new file name in the **File Name** text box.

You can also create or edit a Live TOC file that is already attached to a H.*i*.P. document:

■ Select a document and choose the **Document Properties** command from the **Edit** menu, or click on the [Properties] toolbar button. The H.i.P. **Document Properties** dialog box appears.

■ Navigate to the **Properties** tab and click on the **Live TOC** item under **Document Title**.

■ To create a new Live TOC, click on [New...] . The Live TOC editor appears. (See page 63 for more details on the **H.i.P. Document Properties** dialog box.)

■ To edit an existing Live TOC that is already linked to your document, select the Live TOC from the **Properties** tree and click on [Edit...] . (See page 63 for more details on the **H.i.P. Document Properties** dialog box.)

Creating and editing Live TOCs

The Live TOC Editor dialog box appears:

```
┌─ Live Table of Contents ──────────────────────── [X] ─┐
│                                                       │
│  LiveTOC Name:                            ┌─ Save ─┐  │
│  ┌─────────────────────────────────────┐  └────────┘  │
│  │ Basic LTOC                          │  ┌ Save As… ┐ │
│  └─────────────────────────────────────┘  └──────────┘│
│                         LiveTOC Elements:              │
│                                           ┌ Load UDE… ┐│
│  Elements:              ┌─────────────┐   └───────────┘│
│  ┌──────────┐ ┌────────┐│ H1          │                │
│  │ DIV    ▼ │ │ Add >> ││ H2          │   ┌─ Help ──┐  │
│  └──────────┘ └────────┘│             │   └─────────┘  │
│               ┌────────┐│             │                │
│               │ Delete ││             │   ┌─ Exit ──┐  │
│               └────────┘└─────────────┘   └─────────┘  │
│ C:\Program Files\SoftQuad\HiP\fred.hpl                 │
└───────────────────────────────────────────────────────┘
```
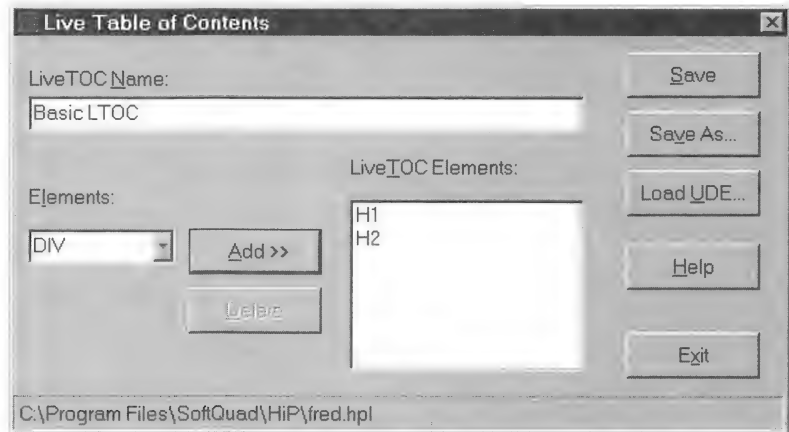
The name of the Live TOC file that you are editing appears in the status field at the bottom of the dialog box.

- Enter a descriptive name for your Live TOC in the **Live TOC Name** text box. This will be the name that will be shown once your Live TOC has been linked to one or more H.i.P. documents. This name will be shown in the TOC menu in the H.i.P. Viewer, in the cyberbolic display (if **Full View** is selected), and in the tree link display. (You may need to remap the project by clicking on the [Remap] button or choosing **Rebuild Link Map** from the **Tools** menu in order to see the newly-attached files.)

Any HTML element can be used in a Live TOC; you can also load a UDE file into the Live TOC editor and use the UDEs it defines in your Live TOC definition file. (Of course, this is only useful if the H.i.P. documents to which you attach your Live TOC use those particular UDEs.)

- Click on the [Load UDE…] button to load your UDEs into the pull-down list of elements. A dialog box in which you can select a UDE definition (*.hpe*) file will appear.
- Navigate to the UDE (*.hpe*) file and select it.

The UDEs will appear in the **Elements** pull-down list.

To add an element to your Live TOC:

- Choose a predefined header element, division element, or UDE from the pull-down list, or enter any other HTML element in the text box.
- Click on the [Add>>] button.

The HTML elements that you select will be listed in the **Live TOC Elements** list.

To delete an element from this list, select it and then click on the [Delete] button.

Once you have created your Live TOC file, you can save it by clicking on the [Save] button, or save it under a different name by clicking on the [Save As...] button. Click on the [Exit] button to close the Live TOC editor. If you have made unsaved changes, you will be prompted to save the changes before exiting.

A Live TOC file must be linked with a H.i.P. document in order to see a Live TOC in the H.i.P. Viewer. A Live TOC can be linked permanently to a file from the **Document Properties** dialog box (see page 71), or temporarily from the H.i.P. Viewer (see page 144).

> **Note** If you attach a Live TOC file to a plain HTML file, the Live TOC will not be displayed when the document is shown in the H.i.P. Viewer. You must convert the file to H.i.P. format first (see page 56).

Styles and Views

SoftQuad H.*i*.P. lets you define your own styles for displaying H.*i*.P. documents. Rather than having the appearance of your documents determined by the Web browser, you can customize the way that users view your document. You can change the way that HTML elements or UDEs appear in the H.*i*.P. Viewer, which means that you can:

□   Show or hide elements, UDEs, defined groups of elements, or individual instances of elements.

□   Change the appearance and layout of any element, UDE, or group of elements.

The style definitions are stored in *style sheets*. Style sheets are used to format H.*i*.P. documents when you display them with the H.*i*.P. Viewer. Style sheets must be linked to H.*i*.P. documents in order to be applied to the H.*i*.P. document by the Viewer. The linked style sheet can be seen in the Link displays and in the H.i.P. **Document Properties** dialog box. You can attach several style sheets to a H.*i*.P. document and move between the different views in the H.*i*.P. Viewer.

The SoftQuad H.*i*.P. plug-ins for both Netscape Navigator and Microsoft Internet Explorer support *hiding* elements or UDEs in views; that is, different style sheets can be applied to H.*i*.P. documents in order to show or hide distinct parts of a document. This is one of the most important features of H.*i*.P. styles. See page 96 for details.

Note Netscape Navigator does not support the CSS standard as of the date of writing, and Microsoft Internet Explorer supports a subset of the CSS features, which are indicated in the detailed discussion of the CSS properties below.

Cascading style sheets (CSS)

H.i.P. style sheets are based on a specification called *cascading style sheets* (CSS). See the end of this chapter for links to further information on the CSS standard. The CSS standard is very flexible and quite complicated: SoftQuad H.i.P. supports a subset of this standard that includes all of the Microsoft Internet Explorer support for style sheets as well as our own special extensions (see page 96).

A cascading style sheet consists of one or more *rules*. There are two different types of rules:

1. Statements associating a *selector group*—an element, a group of elements, a element in a particular context, or some combination—with a *declaration*—a set of style properties and their values. This is the usual type of rule in a style sheet.

2. Statements associating other named properties with values, but not associated with specific elements. These rules are used to set information about the style sheet such as its title, author, etc., as well as specifying imported style sheets and additions to the CSS standard.

Whenever not explicitly stated, we are speaking of the first type of rule.

The *cascading* part of the CSS standard refers to the fact that multiple style sheets can be applied to one document and influence how the document is displayed. A document's style sheets can have several rules that refer to the same element. There is a general scheme of how rules are to be interpreted that allows more specific rules to override more general ones, and rules that are built in to a document to override rules that are linked to a document. See the CSS standard (references at the end of this chapter) for an extensive discussion of these issues.

Simple rules

A *simple* rule, in its most basic form, associates one element or UDE with one or more style properties; for example, set all text within H4 elements to 'bold'.

Class attributes

Simple rules can also associate CLASS attribute of elements with a set of style properties and values. This attribute can be present in many different elements; for example, all elements with the CLASS attribute warning might have the style property 'red'. The warning attribute could be attached to P elements, header elements, or any other HTML element, and the text within all those elements would be colored red. All elements with the same CLASS value are said to be in the same *class*; i.e., the preceding example is the warning class. CLASS attributes are prefaced with a '.' when they are displayed in a style sheet; e.g., .warning.

ID attributes

You can also associate an ID attribute with a set of style properties and values. ID attributes identify a specific instance of an element in a document. For example, you could create a style rule associating the ID attribute AA01 with a particular set of style properties and values, and it would refer to one instance of an element in your document; that is, the one element—let's say P—with its attribute ID set to AA01. The H.i.P. Editor will not validate a file in which the same ID value is used for more than one element. ID attributes are prefaced with a '#' when they are displayed in a style sheet; e.g., #AA01.

Simple rules can be created and edited from the Simple CSS Editor or the Advanced CSS Editor.

Complex rules

A *complex* rule may group together several different elements with a set of style properties and values; for example, set text within H1, H2 and H4 element tags to 'bold italic Times Roman'. Complex rules can also refer to *context-sensitive* selectors; that is, instances of elements that are specified by what elements enclose them. For example, make the text inside EM elements within LI (list items) dark green and bold (and leave EM with its default style—italic—everywhere else). Complex rules can be created and edited from the Advanced CSS Editor.

The CSS Editor

You can launch the cascading style sheet (CSS) Editor in several different ways. To edit an existing style sheet:

- Right-click on a style sheet file in either the Project panel or the Link panel and choose **Edit File** from the pop-up menu. The style sheet editor will be launched using the specified style sheet file.

You can create a new style sheet or edit an existing one in the following ways:

- Choose **Styles...** from the **Tools** menu. A dialog box will appear in which you will be prompted to choose a style sheet (*.css*) file.

- Navigate to the folder where the *.css* file is located, select it, and click on ⬚ Open ⬚ ; or, if you would like to create a new style sheet file, enter a new file name in the **File Name** text box and click on ⬚ Open ⬚ . The style sheet file will be created.

You can also create or edit a style sheet that is attached to a document directly:

- Select a document and choose the **Document Properties** command from the **Edit** menu.

- Navigate to the **Properties** tab and click on the **Views/Styles** item under **Document Title**.

- To create a new style sheet, click on the ⬚ New... ⬚ button. (See page 63 for more details on the **H.i.P. Document Properties** dialog box.)

- To launch the style sheet editor for a style sheet that is already attached to a H.i.P. document, click on the ⬚ Edit... ⬚ button. (See page 63 for more details on the **H.i.P. Document Properties** dialog box.)

The **CSS Editor** dialog box appears:
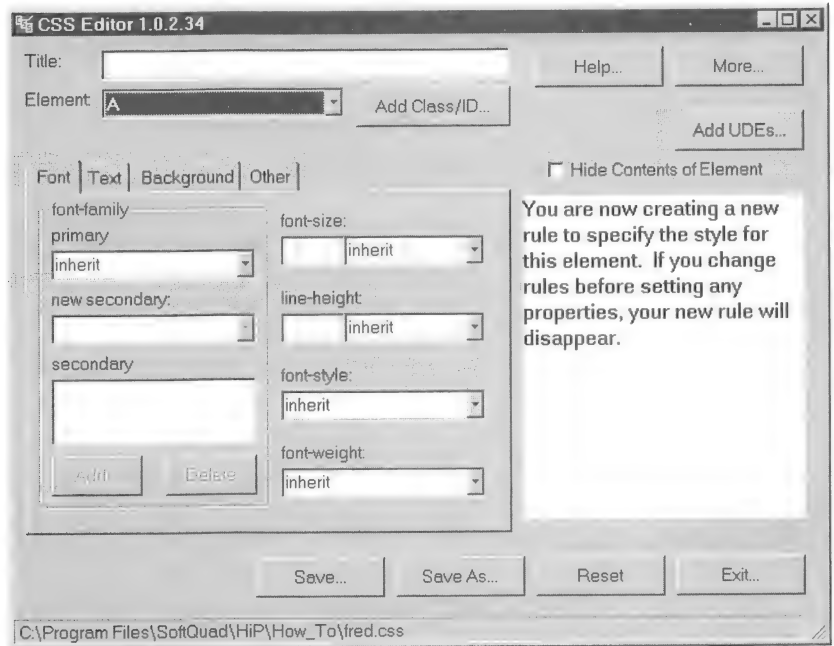
If you launched the CSS Editor from the **H.i.P. Document Properties** dialog box, any UDE definition files listed in the **Document Properties** dialog (i.e., attached to the same document) will be loaded into the CSS Editor automatically. If you would like to load a UDE file after you have opened the CSS Editor, click on the ⌈ Add UDEs... ⌋ button and choose a UDE file. Next time you edit that style sheet, the UDE file that you select will be loaded.

There are two ways to work with the CSS Editor.

- You can use the *Simple* CSS Editor to assign style properties to elements, UDEs, **CLASS** attributes and **ID** attributes directly and assign a title to your style sheet.

– To create more complex style sheets with rules that involve context sensitivity or groupings of elements, you must use the *Advanced* CSS Editor, which can be accessed by clicking on the [More...] button in the upper right corner of the Simple CSS Editor dialog box. (See page 104 for a detailed description of the Advanced CSS Editor and its capabilities.)

Once you have finished creating your style sheet, click on [Save] to save what you have created or modified, or [Save As...] to save the style sheet under a different name. Clicking on [Reset] discards all the changes you have made; that is, the style editor will have the content it had when the file was loaded. Click on [Exit] to dismiss the CSS editor without saving any changes. You will be prompted to save changes if you have modified your style sheet.

The Simple CSS Editor

The Simple CSS Editor is the initial CSS Editor dialog box. You can tell that you are in this editor if the button in the upper right corner reads [More...] . If you are creating a new style sheet, enter a title specification in the Title text box. This text will be shown when the style sheet is displayed in the Link displays (see page 33).

To associate an HTML element or UDE with a style property and value in the Simple CSS Editor, select an HTML element or UDE from the pull-down element list. Once you have selected that element, you can use the tabbed style properties section of the CSS Editor to assign styles to the selected element. (See page 96 for a detailed description of the style properties section of the CSS Editor.)

Note Only rules that assign style properties to HTML elements, UDEs, and CLASS or ID attribute can be created in the Simple CSS Editor. Complex rules must be created in the Advanced CSS Editor.

Style rules for classes and IDs

To create a simple style rule associating a CLASS or ID attribute with a group of style properties and values, click on the [Add Class/ID...] button. The **Edit Simple Selector** dialog box appears:

```
┌─ Edit Simple Selector ──────────────── _ □ × ┐
│                                              │
│  Element:              ID:                    │
│                        ┌──────────────────┐  │
│                        └──────────────────┘  │
│  Class                 Pseudo-class/element   │
│  ┌──────────────────┐  ┌──────────────────┐  │
│  └──────────────────┘  └──────────────────┘  │
│                                              │
│  ┌────────┐  ┌──────────┐  ┌──────────┐      │
│  │   OK   │  │  Reset   │  │  Cancel  │      │
│  └────────┘  └──────────┘  └──────────┘      │
└──────────────────────────────────────────────┘
```
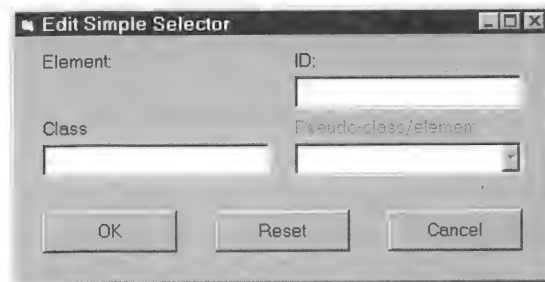
To create a rule that assigns a style to all elements whose CLASS attribute has a particular value, enter the attribute value in the text box provided. The CLASS attribute will be displayed in the **Element** list with an initial period ('.') to indicate that it is a CLASS attribute rule and not an element or UDE rule. CLASS values in an HTML or H.i.P. document must begin with a letter.

To create a rule that assigns a style to a particular element whose ID attribute has a unique value, enter an ID identifier in the text box provided. The ID will show up in the **Element** list with an initial number sign ('#') to indicate that it is an ID attribute rule. The '#' is not part of the ID value; ID values in an HTML or H.i.P. document must begin with a letter.

> **Note** A CLASS or ID rule that has not style properties associated with it will not be saved in the style sheet file.

Style properties

To edit the style of any particular HTML element, UDE, CLASS or ID attribute in the Simple CSS Editor, select it from the Element list. (In the Advanced CSS Editor, you select a rule from the Edit Style Rules list. See page 104 for a detailed description of creating selector groups using the Advanced CSS Editor.) A sample of the current style defined for the item that you have chosen appears at the bottom of the CSS Editor dialog box, beside the tabbed style properties section.

Showing and hiding parts of a document

A style sheet can hide all instances of an HTML element or UDE, a single element or UDE instance, or all of the elements in a class. In the Advanced CSS Editor, you can also choose to create a more complex selector group and hide it in a style sheet. This allows you to have subsections of documents visible or hidden in different style sheets, managing your information more effectively, and allowing users to move between different style sheets for different purposes.

To set a 'hidden' style for any selector group (containing classes, UDEs, elements, or a combination):

- Choose the item from the Element list (Simple CSS Editor) or from the Edit Style Rules list (Advanced CSS Editor).
- Click on the Hide Contents of Element check box.

The sample text will disappear from this dialog box, indicating that the text is hidden. This feature is supported by the SoftQuad H.i.P. Viewer plug-ins for both Netscape Navigator and Microsoft Internet Explorer.

A further example of the use of 'Hide': Let's say two departments within a company are viewing a H.i.P. project about their company's products: Accounting and Sales. The document contains elements that have the class attributes ACCOUNTING and DEVELOPMENT. The H.i.P. documents can have links to two style sheets, one for accounting and one for development, where the special classes .accounting and .development are set to 'Hide' in the other's style sheet. This would permit the accounting department to see information relevant to their department (product stock, depreciation, sales, etc.) while development information would be invisible, and vice versa. Yet there is no need for two documents: one document with two different style sheets does the job. A department that

needs access to both of these kinds of information could have a third style sheet for the document that displays both the .accounting and .development classes.

> **Note** A style sheet that hides particular elements, UDEs, or classes must be attached to a H.i.P. document in order to be applied by the H.i.P. Viewer. While Microsoft Internet Explorer will take care of the style sheet properties, hiding elements and classes is handled by the H.i.P. Viewer. You must add H.i.P. markup to ('H.i.P.-ify') your document before hiding elements and classes will work (see page 56).

Style properties

The properties section is tabbed, allowing you to set groups of style properties by clicking on the tab and moving to the appropriate section: **Font**, **Text**, **Background**, or **Other**.

Many style properties have the default value *inherit*: this means that the value for that property will be inherited from corresponding value for the specification (if any) of its ancestor element or from the default specification for that property in the browser. For example, if the **font-size** property of the **P** element were set to `inherit`, it would have the same font-size property as a **DIV** or **BODY**, depending on which element contained that **P** element.

> **Note** In properties where you must select a value and a unit measurement, you cannot enter any numeric values if the property is set to 'inherit'. You have to choose the unit of measurement first.

Click on the **Font** tab to edit font properties, the **Text** tab to edit text properties, the **Background** tab to edit background properties, or the **Other** tab for miscellaneous properties.

Style specifications are applied immediately, when you change a property value. The changes can be seen in the sample text area next to the properties section. Clicking on the [Reset] button resets the dialog box to no style specifications.

Font properties

Click on the **Font** tab to edit font properties.
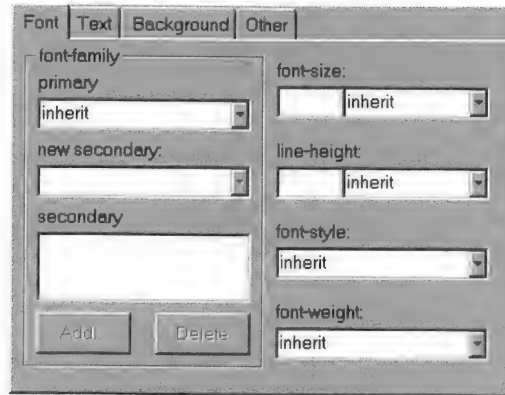
In this section, you can set the following properties:

☐ **font-family:** The Information Manager will list the fonts available on your system in the **primary** pull-down list. You can either choose a font from this list or enter a font name (e.g., **Times New Roman**). You may also specify a *font class* (such as **serif**). The default is **inherit**.

In addition to the primary font family specification, you can specify secondary font or font class specifications, which will be used if the browser viewing the file is unable to find the specified primary font family. For example, if you use the font **Gill Sans** as your primary font family specification, but a user is viewing your document on a PC that does not have the Gill Sans font, you may want to use a secondary specification such as **sans-serif**, so that even if the user is not viewing the document with the exact font that you specified, he or she is at least viewing it with a font of the same type; i.e., a sans-serif font.

Choose your secondary **font-family** specifications from the **New secondary** pull-down list or enter them into the text box. The secondary specifications will be added to the **Secondary** list, and are ranked by order; i.e., an item higher up in the **Secondary** list will be used first, if it is available. You can delete an entry from this list by clicking on an entry and then clicking on the [Delete] button.

☐ **font-size:** select a unit of measurement from the pull-down menu and enter a value for the font size. The css standard allows inches, centimeters, pixels, or points as units of measurement; points are usually the most appropriate unit.

☐ **line-height:** select a unit of measurement from the pull-down menu and enter a value for the space between the baselines of lines of text. You can select inches, centimeters, pixels, or points, or specify a percentage of the font size. For example, if the font size were 10 points, and the **line-height** value were set to 120%, the space between lines would be 12 points (120% of 10 points).

☐ **font-style:** select inherit, normal, or italic from the pull-down list.

☐ **font-weight:** the style sheet lets you to set *levels* of font weight, so you can, in effect, make text 'more bold' and 'less bold'. Selecting normal uses the default weight; selecting inherit uses the same **font-weight** value as the containing element. Selecting lighter or bolder decreases or increases the font weight, respectively. You can also specify font weight on a numerical scale where 100 is the lightest weight and 900 is the heaviest.

Text properties

Click on the **Text** tag to edit text properties.
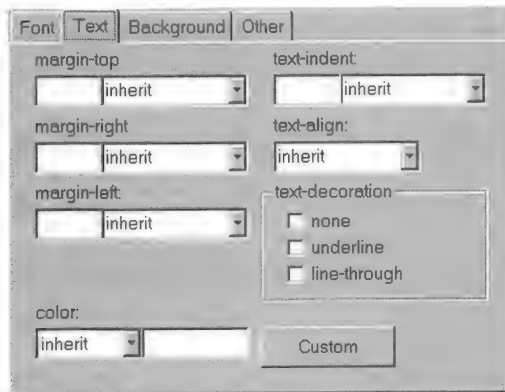
In this section, you can set the following properties:

- [ ] **margin-top, margin-right, margin-left**: set the value for the margin at the top, right, or left side this element. (This is really only useful for 'block' elements such as **P**.) You must first define the units for the value you enter: select from the pull-down list one of centimeters, inches, points or pixels. You can enter a *negative* value: this will move the margins *outward* from their current setting.

- [ ] **color**: specifies the color of the text. There are three ways to specify font color:
  - Select a predefined color from the pull-down list containing the standard sixteen Windows colors.
  - Choose **RGB** from the pull-down list and enter a color in #RRGGBB format.
  - Choose a custom color by clicking on the [Custom] button: the standard Windows color chooser appears (see page 213 for more details on color specifications and using the Windows color chooser).

- [ ] **text-indent**: sets the indent for the first line of the element. Enter a numeric value and choose the units for the value you enter. (To indent the whole element, you would need to set a value for the **margin-left** property.)

- [ ] **text-align** (*justification*): you can choose from **inherit, left, center,** and **right**.

- [ ] **text-decoration**: if no box is chosen, the specification is 'inherit'. You can select **underline** or **strikethrough** or both. If **none** is chosen, any previous value for **underline** or **strikethrough** is overridden.

Background properties

Click on the **Background** tab to edit background properties.
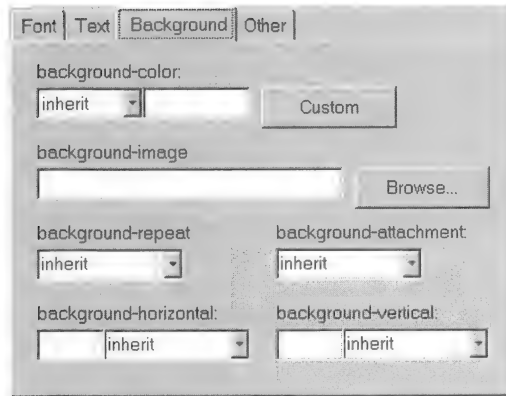
In this section, you can set the following properties:

☐ **transparency:** sets a transparent background. Transparency means that any inherited color will show through. Selecting this style property disables all other background properties.

☐ **background-color:** sets the background color for the specified selector group. There are three ways to specify background color:

  – Select a predefined color from the pull-down list containing the standard sixteen Windows colors.

  – Choose **RGB** from the pull-down list and enter a color in #RRGGBB format.

  – Choose a custom color by clicking on the [Custom] button: the standard Windows color chooser appears (see page 213 for more details on color specifications and using the Windows color chooser).

☐ **background-image:** enter the URL for an image file that you wish to use as a background for the specified selector group (generally, this URL is given in relative format and specifies a file in the current directory).

☐ **background-repeat**: sets how the background image will repeat or 'tile'.

- **repeat** (the default): the background image will repeat indefinitely in both directions
- **repeat-x**: the background will repeat horizontally only
- **repeat-y**: the background image will repeat vertically only
- **no-repeat**: the background image will not repeat; it will only be seen once (useful for large images)

☐ **background-attachment**: specifies whether the background image will scroll along with the browser window when the user scrolls, or whether it will remain fixed.

☐ **background-horizontal, background-vertical**: You can specify the positioning of the background image by choosing a value for either or both of these specifications. **background-horizontal** can have the following values:

- **left**: positions the background image to the left side of the browser window
- **center**: positions the background image in the center
- **right**: positions the background image to the right
- **percentage**: you can specify the exact positioning of a background image by entering a percentage. 0% is the left edge of the browser window (and is equivalent to **left**); similarly, 100% specifies the right edge. 43%, for example, would position a background image just left of center along the horizontal axis.
- **centimeters, inches, points,** or **pixels**: specify an exact positioning using any of these units. The background image will be positioned the specified distance from the left edge.

background-vertical can have the following values:

- **top**: positions the background image at the top of the browser window
- **center**: positions the background image in the center
- **bottom**: positions the background image at the bottom
- **percentage**: you can specify the exact positioning of a background image by entering a percentage. 0% is the top edge of the browser window (and is equivalent to **top**); similarly, 100%

specifies the bottom edge. 75%, for example, would position a background image near the bottom along the vertical axis.

– **centimeters, inches, points,** or **pixels:** specify an exact positioning using any of these units. The background image will be positioned the specified distance from the top edge.

Other properties

Font | Text | Background | Other

Other properties:

Value:

Save | Delete

Property: Priority:
font-family

Comments

Click on the **Other** tab to set miscellaneous properties. In this section, you can set the following properties:

☐ **Other properties** and **Value:** you can specify values for other style properties. Since CSS is an evolving standard, these text boxes allow you to create and set values for other style properties. Enter the name for the style property in the **Other properties** text box and the value in the **Value** text box (for example, `padding-top, 1em`). You can delete these custom properties from the list by clicking on the [Delete] button.

☐ **Priority:** if certain elements are assigned styles in more than one way (e.g., in the document itself and by means of an external style sheet), you can help to resolve style conflicts by choosing priorities for important styles. Select a style property from the **Property** pull-down list, and then enter a specification in the **Priority** text box. Entering `important` in this text box will make the style property you have specified more rigid and less able to be influenced by competing style specifications.

☐ **Comments:** you can enter comments in this dialog box.

Advanced CSS Editor

The Advanced CSS Editor allows you to create both simple style rules and complex rules involving several elements, elements in context, or a combination of the two. As well, you can create rules that import other style sheets, rules that set style sheet meta-information, and rules that extend the capabilities of the CSS standard. The Advanced CSS Editor also allows you to *order* rules with respect to one another. To access the Advanced CSS Editor, click on the [More...] button in the upper right corner of the Simple (default) CSS Editor. The dialog box expands, and the following section of the dialog box becomes visible:

From this section of the CSS Editor, you can create new rules, edit existing rules, copy and delete rules, as well as change the order of rules by selecting a rule and clicking on the appropriate button.

> **Note** Once you have defined a selector group (the first part of a style rule), you must set a style property before creating or editing another rule, or your selector group and rule will not be saved to the style sheet file.

Selector groups

A group of elements and/or elements in context is called a *selector group*. The first thing to do when assigning a style rule to a particular element or group of elements is to define the *selector group*, to show which elements can be grouped together with the same style. A selector group is one half of a rule; the other half is an assigned set of properties (see page 96).

Elements must be put into selector groups so that a style rule can be defined or edited. A selector group can contain one or more elements, UDEs, contextual selectors (see page 108), or it may contain just a specification for the special HTML attributes CLASS and ID (see page 111).

Viewing selector groups

When you first open the Advanced CSS Editor, all the current rules for selector groups are shown in the Edit Style Rules list, including any rules that you created in the Simple CSS Editor by associating an element or UDE with a set of properties and values. (If you have created a new style sheet, nothing will be listed, since no rules have been defined.)

Creating and editing selector groups

In order to group elements in selector groups, you must either create a new selector group or edit an existing one. If you click on the [New...] button to create a new selector group, the following dialog box appears:
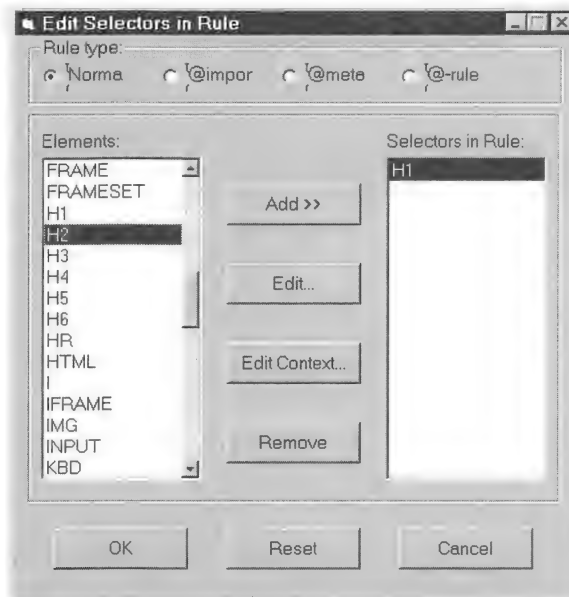
You have a choice in this **Edit Selectors in Rule** dialog box: to create another selector group and associate it with a style, or to define some more general information for your style sheet; i.e., defining an imported style sheet, meta-information about the style sheet itself, or creating extensions to the CSS standard. This same dialog box appears if you click on the [New...] button or the [Edit...] button, but only in the dialog box that appears when you click on the [New...] button are you able to define more general (non-style) rules for your style sheet.

To create a new selector group, leave the radio button on **Normal**, and edit the information as you would in the **Edit Selectors in Rule** dialog box, described below. To create a style sheet rule setting imported style sheets, click on the **@import** radio button. To set style sheet meta-information, click on the **@meta** radio button. To input new style sheet extensions, click on the **@rule** radio button. See page 113 for details on creating these types of rules.

You can copy an existing selector group specification and modify it by selecting a listing in the **Edit Style Rules** list and clicking on [Copy] . Copying an existing rule also copies all of its assigned style properties.

To modify an existing selector group, select a listing in the **Edit Style Rules** list and click on [Edit] . The following dialog box appears:
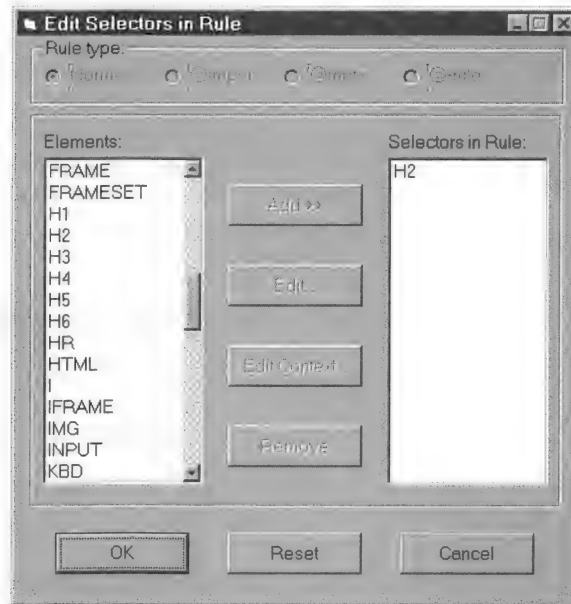
Notice that the rule types selection is grayed out. In this dialog box, you can modify a selector group by copying elements from the **Elements** list to the **Selectors in Rule** list. All selectors in the rule that you chose from the **Edit Style Rules** list appear in the **Selectors in Rule** list and can be edited, modified, and deleted from this dialog box.

To add an element to the selector group:

- Select an element from the **Elements** list.

- Move it into the **Selectors in Rule** list by clicking on the [Add >>] button.

To remove an item from the **Selectors in Rule** list, select it and click on the [Remove] button.

Clicking on the [Edit...] button in the **Edit Selectors in Rule** dialog box brings up the **Edit Simple Selectors** dialog box (see page 110).

Clicking on [Edit Context...] brings up the **Edit Contextual Selector** dialog box (see the next page).

Clicking on [Reset] returns this dialog to its original state, and clicking on [OK] saves the selector group you have defined and returns you to the Advanced CSS Editor dialog box.

Contextual selectors

Sometimes you will want a style rule to apply to an element only when it has a particular ancestor (or ancestors). For example, if we wanted P within DIV to have a different style than P within BODY (i.e., just plain P), we would define a contextual selector DIV P (that is, 'P within DIV'). To define contextual selectors, select an item from the **Selectors in Rule** list in the **Edit Selectors in Rule** dialog box and click on the [Edit Context...] button . The **Edit contextual selector** dialog box appears:
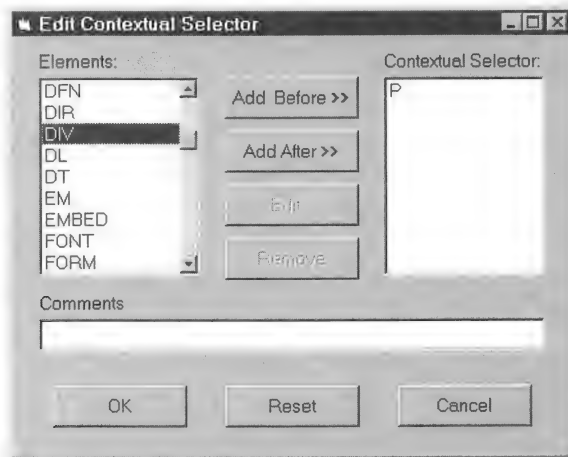
In the **Edit Contextual Selector** dialog box, the ordering of elements is significant. For example, a rule that applies to DIV P (paragraph elements within division elements) is quite different from a rule that applies to P DIV (division elements within paragraph elements). In this dialog box, the difference is determined by which element is first in the **Contextual Selector** list: that element is the ancestor and the following elements are the descendants.

To put an element in the line of the **Contextual Selector** list *before* the current element, click on the [Add Before>>] button. To put an element in the line of the **Contextual Selector** list after the current element, click on the [Add After>>] button. The selection from the **Elements** list will be added before or after the current selection. If no element is selected in the **Con-**

textual Selector list, the selection will be added at the top or bottom of the Contextual Selector list.

For example, to create the contextual selector DIV P:

■ Create a selector group containing just P in the **Edit Selectors in Rule** dialog box, by selecting P from the **Elements** list and adding it to the **Selectors in Rule** list.

■ Select that P and click on [Edit Context] . The **Edit Contextual Selector** dialog box appears.

■ Select DIV from the **Elements** list and click on [Add Before>>] .

■ Click on [OK] .

The DIV P rule will now be listed in the **Edit Selectors in Rule** dialog box. To return to the Advanced CSS Editor, click on [OK] .

Contextual selectors can be quite long; for example, if you wanted to define a style for a unordered list item in a nested unordered list, you could define it as: UL LI UL LI. This would refer to a list item (LI) element whose ancestor was an unordered list, inside an unordered list.

Contextual selectors are treated like individual selectors when creating selector groups. When you exit the **Edit Contextual Selector**, it will appear as a single line item in the **Edit Selectors in Rule** dialog box, and can be grouped together with any single element, UDE, or another contextual selector.
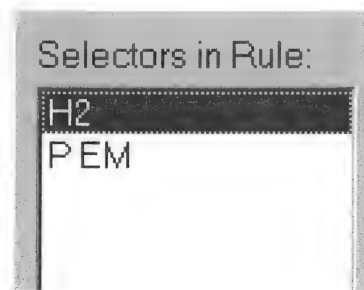
You can add comments to contextual selectors by entering information in the **Comments** text box. These comments will appear beside the contextual selector when it is viewed in the **Edit Selectors in Rule** dialog box or the **Edit Style Rules** list.

Simple selectors

Selector groups and contextual selectors in the Advanced CSS Editor focus on creating rules that incorporate more than one element. Simple rules in the Simple or Advanced CSS Editor define rules for one element or UDE. You can also create rules that define particular instances of an element, or even a unique instance of an element, defined on the basis of that element's attributes. This is done through the use of the **Edit Simple Selector** dialog box.

The **Edit Simple Selector** dialog box allows you refine the particular building blocks that are used to build selector groups. You can add information in this dialog box to define a sub-category of element. The following example uses a **P** element.

If you wish to add a **CLASS** or **ID** specification to an individual element, you can do so from the **Edit Selectors in Rule** dialog or from the **Edit Contextual Selector** dialog. Double-click on the element to be edited, or select it and click on the ⌐Edit...⌐ button. The **Edit Simple Selector** dialog box appears.
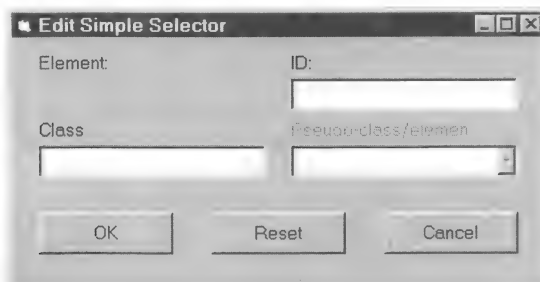
You could use a **CLASS** attribute such as warning in this dialog box. The result would be a style defined for a selector called **P.warning**, which is CSS shorthand for 'a **P** element with a **WARNING CLASS** attribute'. See the next page for details.

Another way to refine the element that you are building a style rule for is to enter a *pseudo-class* or *pseudo-element*. Pseudo-classes are not attributes, but they are characteristics of certain elements that are recognized by programs that understand the CSS standard. Currently, there are three defined pseudo-classes that work on **A** elements, and can be selected from the pull-down list beside the **Pseudo-class** text box. They are **active**, **link**, and **visited**, and would be used to define different styles for the **A** element in its unvisited, visited, and active state; for example, different colors are

generally used to differentiate these different link states. Defined pseudo-classes show up in the **Style rules** list or **Edit Selectors in Group** dialog with a colon separating the element and the pseudo-class; e.g., **A:active.**

Pseudo-elements are used to address sub-parts of elements. For example, a pseudo-element that defines just the first letter of a paragraph has been proposed (to be used for formatting drop capitals, for example), as **P:first-letter.** Pseudo-elements are not currently implemented by Microsoft Internet Explorer or Netscape Navigator, but as the css standard evolves, more pseudo-elements will be understood by css-compliant programs, and you can enter the names of newly defined pseudo-elements in the text box provided.

Creating selectors for attributes only (classes)

You can define style properties for **CLASS** and **ID** attributes that are not associated with any particular element. See page 91 for a discussion of **CLASS**, **ID**, and pseudo-elements. A style rule for a **CLASS** or **ID** selector group can also be created from the Simple css Editor (see page 94). This style rule would apply to all elements that have that **CLASS** attribute. or to the particular instance of an element that has a unique **ID** attribute. To create a selector group for an attribute, you must first create a new, blank selector group:

- From the Advanced css Editor, click on the New... button to open the **Edit Selectors in Rule** dialog.

- Create a selector group using **--Class/ID--** at the top of the **Element** list.

- Select the **--Class/ID--** item and click on the `Edit...` button.
- In the **Edit Simple Selector** dialog box that appears, enter a value for **Class** or **ID**. Click on `OK` .
- Click on the `OK` button in the **Edit Selectors in Rule** dialog.

The CLASS attribute-only rule appears in the selector group list in the form .name-of-attribute; for example, if you were to create a rule with only the CLASS attribute warning, it would appear in the selector lists as '.warning'. Style rules created for this CLASS attribute apply to all elements with the same attribute; e.g., P.warning, DIV.warning, LI.warning, etc. A style rule based on an ID attribute will be displayed in the selector group list with a '#' before it; i.e., a ID attribute of fred will appear in the selector lists as #fred. The styles defined for that ID apply only to the element that has the unique ID attribute value of 'fred'.

You must now associate some style properties and values with this selector; if you do not, the rule will have no content, and will disappear.

Rule ordering

You can change the order of the rules in the Advanced css Editor by selecting a rule and then clicking on the ▨ 'up' or ▨ 'down' arrow to move it higher or lower in the list. This ordering may affect how elements are displayed in the H.i.P. Viewer. See the css standard (references at the end of this chapter) for detailed discussions of rule ordering and its impact on css-compliant viewer software.

Import, meta, and rule-extension rules

You can enter several types of non-style rules in a style sheet:

– Information about importing another style sheet (*@import*).
– Information about the style sheet itself (*@meta*).
– A placeholder for expansion of the css standard (*@rule*)

This information is expressed as a rule, and can be ordered within the style sheet just as style rules can. When you create these general information statements, they are listed in the **Edit Style Rules** list, though you cannot assign style properties to them.

Importing another style sheet

@import: This portion of the dialog box allows you to include another style sheet and all its rules and elements with the current style sheet. This can be quite useful in many ways; for example, if you have made a 'reference' style sheet for the basic styles of your H.i.P. project, and would like to modify only a few selected styles.

To import another style sheet:

■ Create a new style rule by clicking on the ⌐New...⌐ button in the Advanced css Editor.

■ Click on the @import radio button in the **Edit Selectors in Rule** dialog box. The **Edit @import** dialog appears:

■ Enter the URL for the other style sheet in the **URL** text box, or click on the ⌈ Browse... ⌉ button to select it if it is on an accessible drive.

You can also enter comments about this imported style sheet in the **Comments** text box provided.

Adding meta-information

@meta: This section of the dialog box is used for entering information about the style sheet such as **Version** and **Author**. To enter meta-information:

■ Create a new style rule by clicking on the ⌈ New... ⌉ button in the Advanced CSS Editor.

- Click on the @meta radio button in the Edit Selectors in Rule dialog box. The Edit @meta dialog appears:

```
Edit @meta                                    _ □ ×
 Rule type:
  ○ Norma      ○ @impor    ● @meta     ○ @-rule

  Properties
  Name:                      Value:
  [                    ▼]    [                    ]

  Comments
  [                                              ]

          [   Save...   ]      [   Delete   ]


  General comments
  [                                              ]


     [    OK    ]       [   Reset   ]      [  Cancel  ]
```

- Enter the name of a particular kind of information you want to enter in the Name text box, or select one from the pull-down list.
- Enter the value for that piece of information in the Value text box.

Comments on those pieces of information can be entered into the Comments text box, and more general comments can be entered in the General comments text box.

This information can be useful for keeping track of style sheets, versions of style sheets, etc.

Extensions to the CSS standard

@rule: The css standard is continually being upgraded. To enter any newly-created features of css:

- Create a new style rule by clicking on the [New...] button in the Advanced css Editor.
- Click on the **@rule** radio button in the **Edit Selectors in Rule** dialog box. The **Edit @?** dialog appears:

- This dialog box is a plain text box where text of any kind can be added. Enter expansions to the css standard in this dialog.

Please see the references at the end of this section for news of future upgrades to the css standard.

Further information

For details of how to attach style sheets to a H.i.P. document, see page 71. For details of how to manipulate views when documents are being displayed in the H.i.P. Viewer, see page 151.

The specifications for the evolving CSS standard can be found at *http://www.w3.org/pub/WWW/TR/WD-css1.html*. The Microsoft Internet Explorer support for the CSS standard is documented at *http://www.microsoft.com/workshop/author/howto/css.htm*

Searching

The Information Manager has a powerful search engine that lets you search an entire project for documents containing particular text, and replace that text, if you wish.

To find or replace text across documents, click on the [🔍 Find] toolbar button, type ⟮Ctrl-F⟯ at the keyboard, or choose **Find and Replace...** from the **Search** menu. The following dialog box appears:
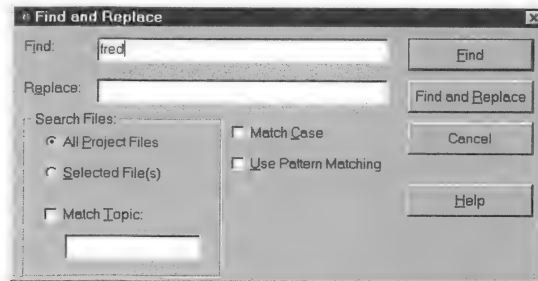
To perform a simple search, enter the text that you want to find in the **Find** text box. If you wish to replace text, enter the text in the **Replace** text box provided. This may replace text in many files or across the entire project, so use this feature with caution.

There are several different ways to select which files you would like to search in a project.

☐ You can select the radio button for **All Project Files** to search in the entire H.*i*.P. project.

☐ You can select **Selected File(s)** to search part of the H.*i*.P. project or a single file (based on the selection in the Project panel).

☐ If you enter a topic in the **Match Topic** text box, the search will be restricted to documents that have that topic. See page 75 for more details about topics and how to set them for H.*i*.P. documents.

There are two other search options that you can choose, indicated by check boxes options in the **Find and Replace** dialog box:

☐ **Match Case:** when checked, the text that is searched for is case-sensitive, and matches the case of the search string that you enter.

☐ **Use Pattern Matching:** Lets you use search patterns. See page 362 for a detailed list of the patterns and how they are used, and see page 368 for a summary of the pattern matching expressions.

You can search for and replace instances of an element by entering the element in the **Find** and/or **Replace** text box; e.g., <H4>.

> **Note** To search for all documents with a specific topic, enter the topic in the 'Match Topic' text box, turn on 'Use Pattern Matching' and in the 'Find' text box enter a pattern (such as '.') which is guaranteed to be matched in every document.

Search results

Once you have completed your search, a dialog box will appear with your search results. If your search did not return any files, a dialog box will appear informing you of that fact.
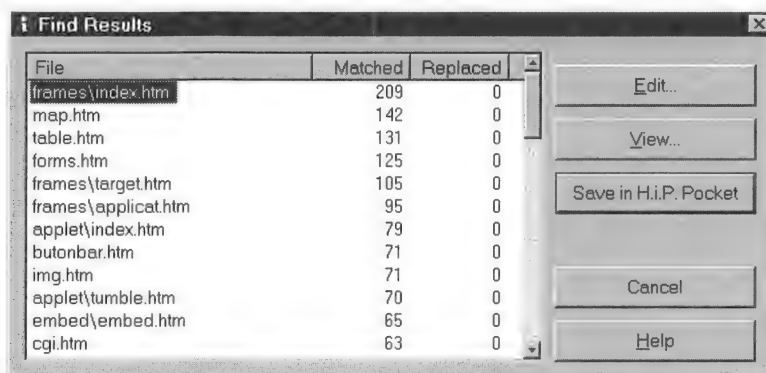
The **Find Results** dialog box shows a list of files, the number of hits in each file, and the number of replacements made, if any. You can sort the files in this list by filename, number of hits, or number of replacements by clicking on the list headers: **File**, **Matched**, or **Replaced**. From the search results dialog box, you can launch the H.*i*.P. Viewer or the H.*i*.P. Editor on a selected file by clicking on the ⬚Edit...⬚ or ⬚View...⬚ button. You can also group all the files that you have found into a H.*i*.P. Pocket and perform further operations on them by clicking on the ⬚Save in H.i.P. Pocket⬚ button. See page 42 for details about the H.*i*.P. Pocket panel, and page 59 for H.*i*.P. Pocket operations.

Publishing

Publishing a H.i.P. project means moving your documents to an intranet server so that other SoftQuad H.i.P. users can have access to your project. The publishing component of the Information Manager lets you publish some or all of your files to a local or remote server. Once you have specified the destination server for your documents, the SoftQuad H.i.P. publishing component will automatically log in to the server and deliver the files to the location you specify.

You can launch the publishing module of the Information Manager in one of three ways:

- Click on the **Publish** radio button at the bottom of the link panel.

- Click on the [Publish] toolbar button.

- Choose **Publish...** from the **Tools** menu.

The Publish display appears in the link panel.

There are two steps to publishing your H.i.P. project:

1. Specify the server that you want to move files to (see the next page).
2. Mark which files in the project are to be published (see page 126).

Choosing the server

A list of destination servers is found in the scrolling list area at the top of the Publishing panel. This list contains the names of servers that have been chosen in previous publishing operations.

Select a server from the list by clicking on it; your files will be published to that server.

To create a new destination, click on the [New...] button. To edit an existing destination, select a list item and click on the [Edit...] button. To delete a destination from the list, select a list item and click on the [Delete] button.

If you are adding or editing a destination, the following dialog box appears:
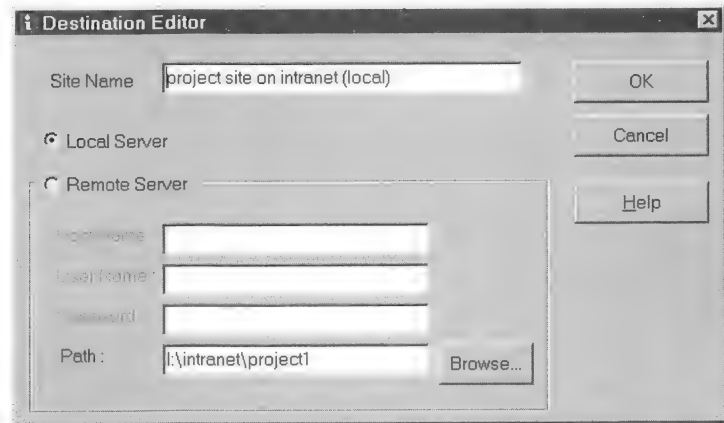
- Enter a descriptive name for this destination in the **Site Name** text box. The server will be identified by this name in the **Destination** list.

- If the destination is a server that is mounted on your PC's filesystem (i.e., accessible through Windows Explorer), click on the **Local Server** radio button. If the destination is a *remote* file server, which will require you to log into a different machine, choose **Remote Server**.

- If you have chosen **Local Server**, all you need do is enter the path to the local server in the **Path** dialog box. You can also use the [Browse...] button to select the path: you will be presented with a dialog box where you can navigate to the folder on your local file system that you would like to publish to. Since you do not need a host name or password to access a local file system, the **Host Name**, **User Name**, and **Password** dialog boxes are grayed out and unavailable.

- If you have chosen **Remote Server**, enter the name of the computer on the network that you are publishing to in the **Host Name** text box. Enter your **User Name** and **Password** for that computer in the text boxes. You also need to specify the path on the remote server: enter the path in the text box provided.

> **Note** Publishing operations that access a remote server can only be performed if you have a connection to a local intranet (behind a firewall) or a direct connection to the Internet.

■ When you have finished entering hosts, click on ⌈ OK ⌉ or ⌈ Cancel ⌉ to return to to the Publish panel.

Choosing which files to publish

This group of buttons lets you choose to publish some or all of the files in the current project.

```
┌─ Mark Files to Publish ─┐
│                         │
│      ┌──────────┐       │
│      │   All    │       │
│      └──────────┘       │
│                         │
│      ┌──────────┐       │
│      │  None    │       │
│      └──────────┘       │
│                         │
│      ┌──────────┐       │
│      │  Reset   │       │
│      └──────────┘       │
│                         │
│      ┌──────────┐       │
│      │ Selected │       │
│      └──────────┘       │
│                         │
└─────────────────────────┘
```

When you open the publish display, red crosses and blue checkmarks appear to the left of the files in the Project panel, indicating your selection of files to be published. To select all the files in the project for publishing, click on the ⌈ All ⌉ button: blue checkmarks appear to the left of the files in the Project panel. Clicking on ⌈ None ⌉ deselects all the files: red crosses appear to the left of the files in the Project panel.

You can also select or deselect individual files for publishing in the Project display by clicking on the checkmark or cross with the mouse; the mouse-click changes the publishing status of a selected file to deselected

and vice versa. Clicking on [Reset] changes the selected or deselected status of the files back to their previous state. Clicking on [Selected] puts a check mark by all the files that are currently selected (highlighted) in the Project panel.

Completing the publish operation

Once you have selected a host and marked the files that you want to publish, click on the [Send] button to copy the files to the selected server. The following dialog box appears:
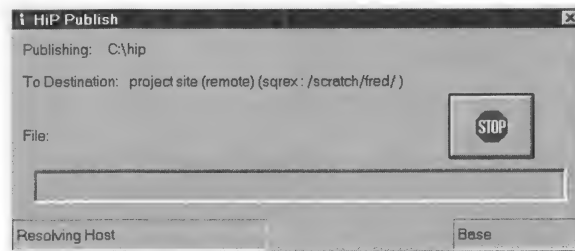

Status reports on the file transfer are shown at the bottom of this dialog box. Clicking on the [stop] button stops the transfer. If you have specified directories in the path for publishing, they will be created: the following dialog box will appear, asking you if you would like to create the specified directories:
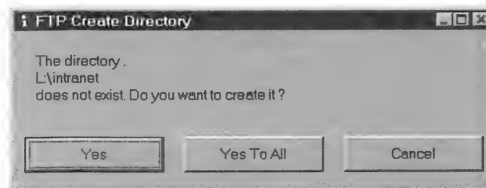
Creating distribution lists

You can notify people that a set of documents have been published by creating a *distribution list* of email addresses. Clicking on the ⟨ Edit ⟩ button in the Distribution List section of the Publish display brings up the following dialog box:
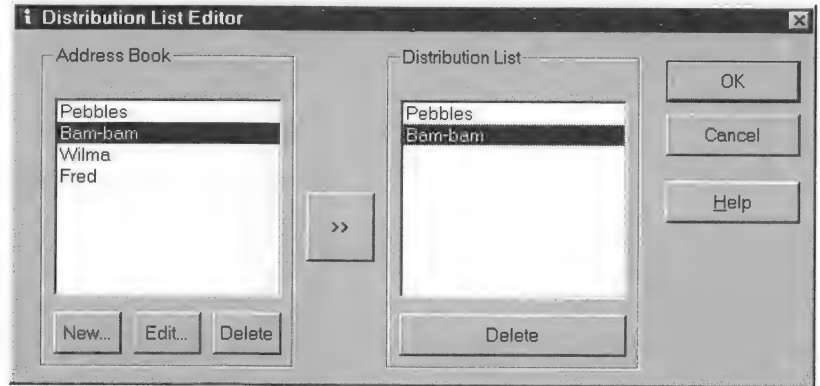
This dialog box has two parts: a master list of email addresses—your *address book*—and a list of people who will be notified of the current publish operation, in the distribution list. The address book is your master list; it stays the same even if you open or modify a different project, whereas the distribution list is selected for the current project only: you can choose one or more users from the address book and create a distribution list to notify or subscribe to a particular project. To add one or more users to the distribution list, click on their names in the Address Book list and then click on the ⟨ >> ⟩ button. To delete users from the list, click on their names in the list and click on ⟨ Delete ⟩ .

To enter new names and email addresses in the address book:

- Click on the [New...] button. The **Address Book Edit** dialog box appears:
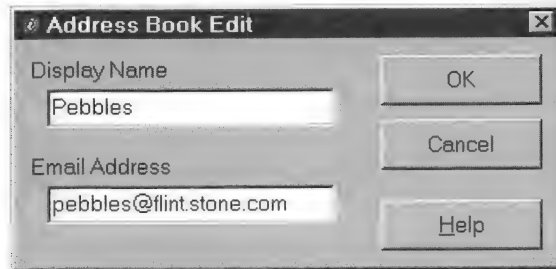
- Enter the display name and an associated email address, then click on [OK].

To modify the names and email addresses of the people in your address book:

- Click on a name in the **Address Book** list and choose [Edit...]. The **Address Book Edit** dialog box appears with the selected name.
- Modify the display name or email address, then click on [OK].

You can also delete names and addresses from the address book list by selecting them and clicking on the [Delete] button. Clicking on [OK] brings you back to the Publish display.

In the Publish display, click on the **Notify** check box if you want to notify the people on the distribution list once, when you publish the current project. If you want to notify the people on the distribution list *every* time the H.i.P. project changes, click on the **Subscribe** check box. You can only click the **Subscribe** check box if the **Notify** check box is checked.

Notification takes place when the H.*i*.P. Monitor receives and processes the instruction, which should occur within a few minutes. See page 375 for more details on the H.*i*.P. Monitor.

Mapping a remote site

You can create a cyberbolic display of a remote site—that is, a site on your intranet or on the World Wide Web—by choosing the **Map External Site...** command from the **Tools** menu. You can also find broken links in your project that refer to non-existent documents on the World Wide Web by choosing **Find External Broken Links** from the **Search** menu. However, if your organization has Internet security, such as a firewall, you may need to configure a proxy server in order to communicate with the Internet. If you have a direct connection to the Internet from your local computer, you need not configure a proxy server.

Configuring a proxy server

Quite often, organizations with Internet access route their access through one machine—called the *gateway* or *firewall* machine—for security reasons. In order to access the Internet from behind a firewall, you must configure your Internet software with the address of the *proxy server*. The proxy server—which *is* directly connected to the Internet—takes Internet requests and sends them out on the Internet, returning the responses to your computer.

You can configure a proxy server by choosing **Configure Proxy...** from the **Tools** menu. The following dialog box appears:
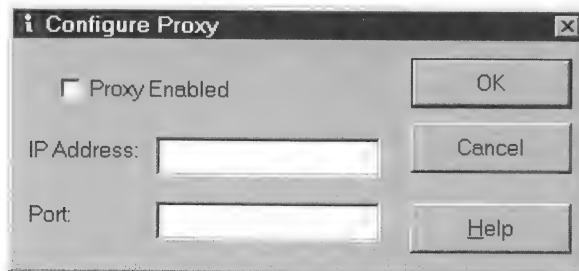
Enter the IP address or domain name (if you have a domain nameserver running) and port of your proxy server. (You may need to ask your system administrator for this information, or it may be available to you in your Web browser's configuration.) Click on the **Proxy Enabled** check box if you want the Information Manager to route its Internet information requests through the proxy server.

Finding external broken links

An external link is a link to an address on the Internet, and specifically, to a page on the World Wide Web. The Information Manager has the ability to search the Internet automatically to find whether the external links in your project are valid; that is, refer to a real page. To find broken external links on your site, choose **Find External Broken Links** from the **Search** menu. The Information Manager starts searching the World Wide Web to resolve the external links in your project. The operation starts immediately and the following dialog box appears:
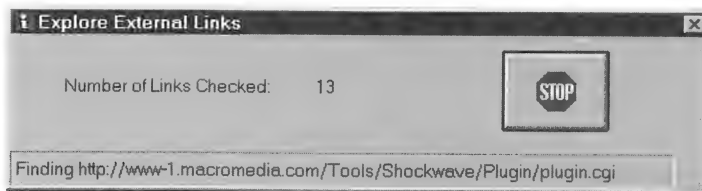
You can click on the [■] button to stop the external validation at any point, and interim search results will be displayed.

If there are broken external links in the project, a notification dialog box appears, and the files that contain broken external links will be saved to a H.*i*.P. Pocket called **Files with External Broken links**. You can edit those files to remove the broken links, delete them, etc. If there are no external broken links in your H.*i*.P. project, a dialog box will appear informing you of the fact.

Mapping an external site

To create a cyberbolic view of a site on the World Wide Web, your PC must be connected to the Internet. You may need to configure a proxy server (see page 131). You can map an intranet site whether or not you are connected to the Internet. Choose the **Map External Site...** command from the **Tools** menu.

The following dialog box appears.

Enter the URL of the site that you wish to map in the **Site URL** text box, and click on the [Map Now] button. If you want to cancel the mapping operation, click on the [STOP] button. The cyberbolic view will appear in this window gradually, as more files are added. The status of the mapping operation, showing what files are being accessed, is displayed at the bottom of this window, .

To dismiss the dialog box and return to the Information Manager, click on [Quit] .

Welcome to the H.i.P. Viewer

What is the H.i.P. Viewer?

The H.i.P. Viewer is a component of SoftQuad HoTMetaL Intranet Publisher. It works with the H.i.P. Editor, Information Manager, and Monitor to allow you to view not only standard HTML documents, but H.i.P. documents as well.

The H.i.P. Viewer consists of a set of plug-ins that work with your Netscape Navigator or Microsoft Internet Explorer Web browser.

In conventional World Wide Web browsing, you generally have little control over how the document is presented; you simply view the document 'as is' in your browser. SoftQuad H.i.P. gives you control over the document by allowing you to:

☐ View and manipulate one or more *Live Tables of Contents*, generated for each H.i.P. document you load into your browser (see page 144).

☐ Select different *views* of the document depending on the information you need (see page 151).

☐ Do *context-sensitive searches* of the document (see page 152).

☐ View *pop-up windows* in the document panel (see page 142).

☐ Create *annotations* to documents (see page 154).

☐ Click on a *single icon* to *access links to many different* locations (see page 143).

Since some of the concepts in the H.*i*.P. Viewer reference are easier to understand if you have an example to look at, we have provided a H.*i*.P. document for your viewing pleasure while you work through this reference. As we explain each feature in the documentation, you can refer to the example file we provide. To get started:

■ Launch your favorite Web browser with the H.*i*.P. Viewer plug-ins installed.

■ Open the file *vwhlpd1.htm* in the *help\vwsample* folder in your H.*i*.P. installation folder.

Every time we refer you to the sample file, we'll note it in the margin with an icon like the one at left.

The H.*i*.P. Viewer works as part of your Netscape Navigator or Microsoft Internet Explorer Web browser, but it doesn't change the way you surf the Web. Your browsers are still the same. The only difference is that when you load a H.*i*.P. document, the H.*i*.P. Viewer plug-in starts up, giving you access to a more dynamic document than conventional HTML.

If you try to load a H.*i*.P. document into Netscape Navigator or Microsoft Internet Explorer (or any other frames capable browser) without the H.*i*.P. Viewer plug-ins installed, you will not be able to view the document. H.*i*.P. documents are viewable in older, non-frames capable browsers (e.g., Mosaic), but we don't recommend doing so, since the H.*i*.P. features use advanced HTML and will not display properly.

> **Note** The H.i.P. Viewer uses JavaScript to display H.i.P. documents. You must enable JavaScript in your browser in order to use the H.i.P. Viewer. See your browser documentation for information on enabling JavaScript.

Configuring your server

Once you have installed the H.i.P. Viewer plug-ins, you can view H.i.P. documents on your PC or network file system by choosing **Open File** in your browser, or by following *file* links (e.g., *file:///h\public_html/ index.html*) rather than *http* links.

However, in order for you to be able to view H.i.P. documents on an intranet server with the H.i.P. Viewer, your NCSA *httpd* server must be configured to use the *text/x-vnd.sq.hip* MIME type, which is associated with files with the *.hpv* file extension. This can be done as follows (usually this should be done by your site's systems administrator or Webmaster):

- Add the following line to the NCSA *httpd* server configuration file *conf/mime.types*:

  ```
  text/x-vnd.sq.hip hpv
  ```

- Add the following line to the NCSA *httpd* server configuration file *conf/srm.conf*:

  ```
  AddType text/x-vnd.sq.hip .hpv
  ```

If the server is not configured properly, then when you attempt to view a H.i.P. file on an intranet:

- You will get a warning message from the browser stating that a plug-in application is required.
- The table of contents panel will contain blank frames, with a 'puzzle piece' icon in the left frame.

The H.i.P. table of contents panel

When you load a H.*i*.P. document, the H.*i*.P. table of contents panel appears on the left side of your Web browser's window. If you're familiar with frames in Web pages, you can think of the H.*i*.P. table of contents panel as a separate frame. The table of contents panel has its own toolbar along the top. You can adjust the size of the table of contents panel by dragging the vertical bar between it and the document panel.

The Live TOC

The table of contents panel displays a *live table of contents* (Live TOC) for the document that is displayed in the document panel. The table of contents is *Live* because it is not static: it is generated on-the-fly by the Viewer and can be manipulated in a number of ways (see page 144).

The toolbar

The toolbar at the top of the table of contents panel consists of nine buttons that allow you to customize how information in the H.*i*.P. document is presented. They are:

☐ **Change Live TOC:** choose a different table of contents or edit an existing table of contents (see page 144).

☐ **Sort the Live TOC:** sort the live table of contents (see page 148).

☐ **Expansion Level:** select the level of nested headings and subheadings that are displayed in the table of contents (see page 148).

☐ **Change View:** choose author-defined alternate views of the document (see page 148).

☐ **Search:** perform a context-sensitive search on the document (see page 152).

☐ **Annotate:** create and read comments about the document (see page 154).

☐   **Options**: select options for the H.*i*.P. Viewer (see the next page).

☐   **Help**: view on-line help in H.*i*.P. format.

Notice that if you hold your cursor over any of these buttons, a *tooltip* will appear, telling you what the button does.

The H.i.P. document panel

The H.*i*.P. document is displayed in the right side of your Web browser's window. H.*i*.P. documents can have a number of features that appear in the document panel, including H.*i*.P. pop-ups (see page 142) and one-to-many links (see page 143).

Setting the H.i.P. options

The H.*i*.P. Viewer has several user-configured options that let you customize some of its features, and identify yourself to other users of your intranet.

User information

If you want to be able to subscribe to Web pages using the H.*i*.P. Monitor (see page 375) or identify your annotations (see page 154) to H.*i*.P. documents, you must specify your personal identification in the **Options** dialog.

■   Click on the   (**Options**) toolbar button; this will open a dialog box.
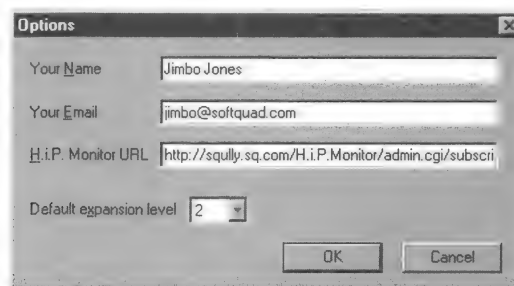
- Enter your name (used to identify H.*i*.P. annotations).
- Enter your email address (used to subscribe to specific pages, topics, or authors).
- Click on [OK] .

H.i.P. Monitor URL

If the H.*i*.P. Monitor is installed on your intranet, you can use the **Options** dialog to set the URL for the H.*i*.P. Monitor so that you can subscribe to pages, authors, and topics through the H.*i*.P. Viewer (see page 375 for more information about the H.*i*.P. Monitor).

Default Live TOC expansion

You can expand or contract the Live TOC to increase or decrease the detail of the entries (see page 147). To specify the default expansion of the Live TOC:

- Choose a level from 1 to 8, or **All**, from the pull-down menu in the **Options** dialog.

Viewing a H.i.P. document

Viewing a H.i.P. document means more than viewing a conventional HTML document on the World Wide Web or on an intranet. SoftQuad H.i.P. gives you much better control over the information contained in a document, and allows you to configure that information to suit your needs.

Opening a H.i.P. document

Because the Viewer component of SoftQuad H.i.P. works with your current Web browser, the H.i.P. Viewer plug-ins will automatically start when you load a H.i.P. document. You can also launch the Viewer from the H.i.P. Information Manager by clicking on the document you want to view in the project or link panel, and either:

- Choosing **View in Browser** from the **File** menu.

Or:

- Clicking on the toolbar button.

Or:

- Right-clicking and choosing **View in Browser**.

This will launch your browser with the H.i.P. Viewer plug-ins and load the page that you selected. From the H.i.P. Editor, you can display the current H.i.P. document in the Viewer by using the **Preview** command (see page 172).

The document panel

The document panel is the area where the document is displayed. It displays a H.i.P. document the same way that your browser normally displays an HTML document, including any extensions to HTML that are defined for the Web browser you're using. H.i.P. documents also have several features of their own that appear in the document panel.
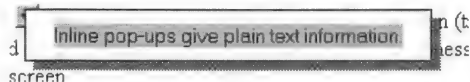
Pop-ups

H.i.P. documents can contain two kinds of pop-ups: *inline* and *block*.

The sample file has an example of each kind of pop-up. Click on them to see what happens.

Inline pop-ups are indicated by a [icon]. When you click on an inline pop-up icon, a plain text pop-up message will be displayed over the location you clicked on. The pop-up message will close if you click anywhere else on your screen.

Inline pop-ups give plain text information

Block pop-ups are indicated by the following icon:

A block pop-up window is actually a separate browser window containing text and markup tags. Block pop-ups can contain links, graphics, and any content that your browser can display. Block pop-up windows will remain open until you close them manually, even if you exit the H.i.P. Viewer.
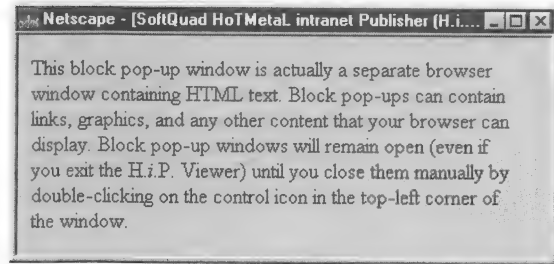
One-to-many links

One-to-many links or *multilocs* are menus of links that connect *one* location in a document to *many* locations or documents.

One-to-many links appear as ⬛ icons in the document panel. When you hold your mouse cursor over the icon, you'll notice that the pointer changes to a hand with the word 'H.i.P.' beneath it. If you click on the icon, a menu of links appears. If you click on any of the links in the menu, the H.i.P. viewer will load the page (or location) that the link points to. It may be an HTML page from the World Wide Web, or another H.i.P. document.

Links can be nested: if you choose an item that has an arrow beside it, a fly-out sub-menu of links appears.
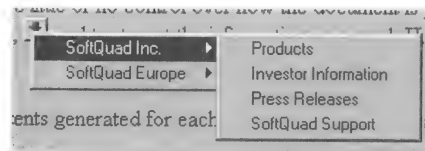
The sample file has a multiloc towards the end of the document. Click on it to see where it will take you.

The live table of contents (Live TOC)

The Live TOC is created by the H.i.P. Viewer as it loads a document. In a document that has no pre-defined Live TOCs (see this page), the default Live TOC is a **Full Tree** consisting of all of the heading elements (H1, H2, etc.) in the H.i.P. document. Entries in the Live TOC are hot links: if you click on an item in the table of contents, the H.i.P. document panel will jump to that location in the H.i.P. document.
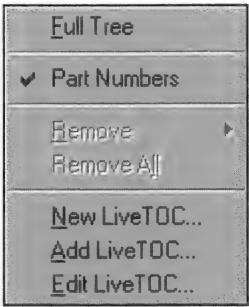
Using a different Live TOC

A H.i.P. document can have more than one Live TOC. The author may have linked more than one Live TOC to the document in order to give you more than one way to access the information in the document. If the document has more than one Live TOC, the first one will be the default Live TOC that appears in the table of contents panel when you load the document.

You also have the option of editing or creating a Live TOC to suit your own information needs. To choose or edit a Live TOC,

- Click on the **Change Live TOC** (⊞) button in the Live TOC panel toolbar.

This brings up a menu such as the following:

```
┌─────────────────────┐
│  Full Tree          │
├─────────────────────┤
│ ✔ Part Numbers      │
├─────────────────────┤
│  Remove          ►  │
│  Remove All         │
├─────────────────────┤
│  New LiveTOC...     │
│  Add LiveTOC...     │
│  Edit LiveTOC...    │
└─────────────────────┘
```

The first entry is always **Full Tree,** which displays all of the headings in the document. If the author has defined any additional Live TOCs, they will be listed below the **Full Tree** (in the above picture, **Part Numbers** is the name of a Live TOC that the author has associated with the document).

- Choose a Live TOC from the menu.

In this menu you can also:
- ☐ Create a new Live TOC
- ☐ Add an existing Live TOC that has been created for the document
- ☐ Edit the current Live TOC
- ☐ Remove selected Live TOCs or all Live TOCs that you have added during a viewing session

In our sample document we have provided two different Live TOCs. The first is called **Headings** and the second is called **Keywords**. **Headings** is the default that came up when you opened the document. You can switch to **Keywords** by following the instructions above.

Creating a new Live TOC

To create a new table of contents:

- Click on the ▣ (**Change Live TOC**) toolbar button.
- Choose **New Live TOC...** from the pop-up menu.

This opens the Live TOC Editor so you can create a new Live TOC (see page 85 for a description of how to create a new Live TOC). Once you have created the Live TOC, click on the [Exit] button to close the Live TOC editor. If you have made unsaved changes, you will be prompted to save the changes before exiting.

The Live TOC you have created will now be available from the pop-up menu when you click on the ▣ (**Change Live TOC**) toolbar button. It will be listed below the **Remove**, and **Remove All** items in the pop-up menu (see page 147).

**Tips for creating Live TOCs**

Live TOCs can be a powerful way of gathering information for your document readers since you can create Live TOCs based on any HTML element or UDE in the document. Here are a couple of points about Live TOC behavior that you should be aware of so you can make the most of them:

- ☐ *Live TOCs and classes*:A Live TOC treats any element with a CLASS attribute as a UDE (since UDEs are really just elements with a specific CLASS attribute defined by a separate file). This means, however, that if you have an H3 element with a CLASS attribute of SpecialMention and your Live TOC includes H3s, then none of the H3s with the class attribute will appear in the Live TOC. In order to have these appear in the Live TOC, you must include the UDE SpecialMention.

□ *Live TOC hierarchy*: If you haven't defined any Live TOC items, the H.*i*.P. Viewer automatically chooses H1-H6. The hierarchy is not absolute, that is, if you have only H1 elements and H4 elements in your document, the Live TOC will nest the H4 Live TOC items directly under the H1s, ignoring any missing intermediate levels. This will not happen if the headings are contained within a DIV element, since H.*i*.P. doesn't want to mess up the use of DIV elements to create hierarchy. If you *have* created a Live TOC for a document, the hierarchy of elements in the Live TOC is relative only to the elements defined in the Live TOC; it is not based on the document as a whole, and will also skip any missing intermediate levels.

Adding a Live TOC

To load an existing Live TOC into the table of contents panel:

■ Click on the [▤] (**Change Live TOC**) toolbar button.

■ Choose **Add Live TOC...** from the pop-up menu.

This opens a dialog box that lets you open a Live TOC definition file.

■ Choose a Live TOC (*.hpl*) file.

■ Click on [Open] .

We have provided an extra Live TOC file for you to add called *extra.hpl*. You can open this from the *help\vwsample* folder in your SoftQuad H.*i*.P. folder. This Live TOC will only reveal any text contained within a TT element, but you will be able to practice loading and removing it from your document.

The table of contents panel will refresh and load the table of contents you just added. The table of contents will now be available from the **Change Live TOC** pull-down menu for this document for the duration of the H.*i*.P. Viewer session.

> **Note** If a Live TOC file contains elements that do not occur in the current document, no entries for these elements will be displayed in the Live TOC panel.

Edit an existing Live TOC

To edit an existing Live TOC:

- Click on the ▦ (**Change Live TOC**) toolbar button.
- Choose **Edit Live TOC...** from the pop-up menu.
- From the file chooser dialog, choose the Live TOC (*.hpl*) file you want to edit and click on ⎡ Open ⎤ . This opens the **Live TOC Editor** dialog.
- Edit the Live TOC as explained in the H.*i*.P. Information Manager reference (page 85).

Removing Live TOCs

You can remove any Live TOCs that you have created or added in the H.*i*.P. Viewer. You cannot remove Live TOCs that are defined within the document by the document author. To remove one or more Live TOCs:

- Click on the ▦ (**Change Live TOC**) toolbar button.
- Click on the **Remove** fly-out menu item.
- Choose the Live TOC that you want to remove.

This will remove the association that you have created between the Live TOC (*.hpl*) file and the document. It will *not* delete the *.hpl* file from the disk.

To remove all of the Live TOCs you have associated with the document:

- Click on the ▦ (**Change Live TOC**) toolbar button.
- Click on the **Remove All** menu item.

This will remove all of the additional Live TOCs from the menu that were not created by the document author.

Expanding and contracting the Live TOC

Unless you have changed the expansion level in the **Options** dialog (see page 139), the Live TOC is fully expanded; i.e., it shows all of the headings and subheadings in a tree structure. You can expand and contract the tree structure to increase or decrease the detail shown in the table of contents. For example, you may want to contract the Live TOC of a long document so that only the major headings are visible. An expanded heading will have an ⊟ icon preceding it, and the subheadings will be displayed below it. Each level of heading is indented from its parent to make the structure of the document clearer. If you click on the ⊟ the

entry contracts; a ⊞ precedes the parent heading to indicate that the entry can be expanded. You can expand and contract the various sections of the table of contents by clicking on these icons.

You can also adjust the display of headings by clicking on the ⊞ (**Expansion Level**) toolbar button. This gives you a pull-down menu of all of the possible heading levels from 1 to 8, plus 'All'. If you select 1, only the first level table of contents entries will be displayed. If you click on 2, the first and second level entries will be displayed, and so on.

Give it a try in the sample document. There are at least four levels of nested headings in the **Headings** table of contents.

Sorting the TOC

Live Tables of Contents are simply lists of elements displayed in the order they appear in the document.

```
☐  •  Learning About HiP
          •  1. What is HiP?
          •  2. What can I do with HiP?
          •  3. How can I get HiP?
       ☐  •  The HiP Viewer
                •  What is the HiP viewer?
                •  1. What does it do?
                •  2. What browsers does it work with?
          •  What Does HiP Really Mean?
    ☐  •  Are HiP People Nice People?
          ☐  •  Appendix
                   •  a) HiPsters in the modern age
                   •  b) Who's HiP?
                   •  c) The Elvis HiP swing.
```

You can reorganize the table of contents to make it easier to find information in the document by clicking on the ↕ (**Sort Live TOC**) toolbar button to sort the table of contents. This gives you a menu with three choices: **Original Order**, **Ascending**, and **Descending**.

☐ **Ascending** sorts entries in alphabetical order.

☐ **Descending** sorts entries in reverse-alphabetical order.

☐ **Original Order** restores the default order.

Entries will be sorted within each level of the hierarchy, so subheadings will not be mixed with the headings above them. The table of contents in the previous illustration sorts like this in the two orderings:

Ascending Sort	Descending Sort
⊟ • Are H.i.P People Nice People?	• What Does H.i.P Really Mean?
⊟ • Appendix	⊟ • Learning About H.i.P
• a) H.i.Psters in the modern age	⊟ • The H.i.P Viewer
• b) Who's H.i.P?	• What is the H.i.P Viewer?
• c) The Elvis H.i.P swing.	• 2. What browsers does it work with?
⊟ • Learning About H.i.P	• 1. What does it do?
• 1. What is H.i.P?	• 3. How can I get H.i.P?
• 2. What can I do with H.i.P?	• 2. What can I do with H.i.P?
• 3. How can I get H.i.P?	• 1. What is H.i.P?
⊟ • The H.i.P Viewer	• Are H.i.P People Nice People?
• 1. What does it do?	⊟ • Appendix
• 2. What browsers does it work with?	• c) The Elvis H.i.P swing.
• What is the H.i.P Viewer?	• b) Who's H.i.P?
• What Does H.i.P Really Mean?	• a) H.i.Psters in the modern age

The most obvious use for sorting would be long lists of items like phone lists or email lists. In our sample document we've just listed some keywords that appear throughout, and collected them into a **Keywords** Live TOC. If you load this Live TOC you can see how useful it would be if you had long lists to sort through.

> **Note** Sorting the Live TOC re-orders only the table of contents panel; the document panel does not change.

Managing a document

H.i.P. documents aren't simply for looking at; they are tools for communicating specialized information throughout an intranet.

Changing views

SoftQuad H.i.P. lets authors create single documents that can be viewed in several different ways by applying different styles to (or even hiding) sections of the document. Each way of presenting the document is called a *view*. You can select a view that the author has set up by clicking on the

 (Change View) button in the toolbar. If the toolbar button is grayed out, there are no alternate views defined for the document.

When you click on the button, a pop-up menu will display a list of available views. There will be a check mark beside the current view. If you choose another view, the document will reload in the document panel and a new table of contents will be generated. Choose View All to display all of the view categories at once.

The sample file contains two views: a default view called Regular View and another view called Notables. See what happens when you choose Notables.

Context-sensitive searching

You can search for text in a document by clicking on the [search icon] (Search) toolbar button.
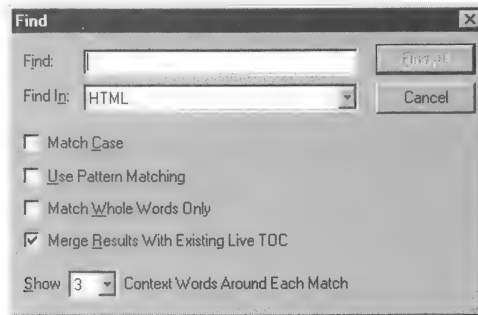
The Find dialog box lets you specify a string to search for, and the element in which to search. You can configure the search to **Match Whole Words Only**: the search will succeed only if the *Find* text matches a sequence of one or more *whole* words. You can also make the search case sensitive by clicking in the **Match Case** check box.

> **Note** The search feature will not allow you to search across elements: e.g., if the file has "a <B>Big</B> rabbit" the search string 'a Big' will not find the text.

You can limit the search to a particular element in the document by choosing it from the Find In drop-down list in the **Find** dialog. This menu lists all of the elements in the document. For example: to limit the search to level one headings only, select **H1** from the Find In menu. If you don't want to restrict your search, choose **HTML** (this is the default).

You can also use pattern matching in your search.

- Turn on the **Use Pattern Matching** checkbox.

This lets you enter the text of your search using special characters to represent one or more characters to search for.

Once you have selected your string, its parameters, and the context for the search, choose how you want the results displayed. You can display the results as a new list in the table of contents panel, or you can show the search results within the current table of contents:
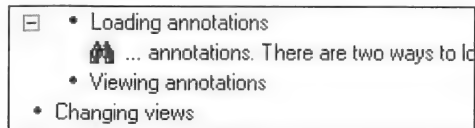
- Check or uncheck the box labeled **Merge Results with Existing Live TOC**.

Using a pull-down list, you can also set the number of context words, (i.e., words around your search results) that you want to display. This number represents the number of words the H.i.P. Viewer will display both before and after your search result. Note that context words outside the element that the text is found in will not be displayed.

To execute your search:

- Click on the [Find All] button.

If you chose to merge your results with the existing Live TOC, your search *hits* will appear in the Live TOC according to the location of the *hit* in the Live TOC structure. The TOC will display part of the text in which your search string was found, accompanied by a 'binoculars' icon. If you click on this icon, you can annotate the section of the document containing the search text (see the next page). If you click on a *hit*, the document panel will scroll to that point in the document.

```
☐  • Loading annotations
        🔍 ... annotations. There are two ways to lo
    • Viewing annotations
  • Changing views
```

If you did not choose to merge the search results, a new table of contents will be generated containing only the results text. Click on any item in the Live TOC to scroll to that point in the document. The table of contents containing the search now appears as **Search Result** in the Live TOC pop-up menu when you click on the [▤] (**Change Live TOC**) toolbar button. This search results Live TOC will be available from the **Change Live TOC** menu until you do another search.

Why not try searching for the text 'web browser' in your sample file to see what happens?

Annotations

The H.i.P. Viewer lets you make notes, called *annotations*, about the document you're viewing, as well as read other viewers' annotations. When you annotate a document, you save your annotations to a file that you can load the next time you load the H.i.P. document. You can also save the file on a network drive so that other viewers can load the annotations you made. An annotation file applies to a specific H.i.P. document, and contains all of your annotations for that document.

Loading annotations

If you are viewing a document that someone else has created annotations for, you can load these annotations by opening the annotation file from the location specified by the author of the annotations. There are two ways to load an annotation file:

☐ Load for viewing only.

☐ Load for editing.

You may want to edit the annotations that go with the document (especially if they are your own annotations); keep in mind, however, that you may not be able to save the annotations to the same file if you do not have write privileges on the file. If you want to load someone else's annotations, you'll have to find out where the annotations were saved (and have permission to read the file). To load annotations:

- Click on the ▨ (**Annotation**) toolbar button.

- Choose **Load...** or **Load for Editing...** from the pop-up menu. This brings up the following dialog:
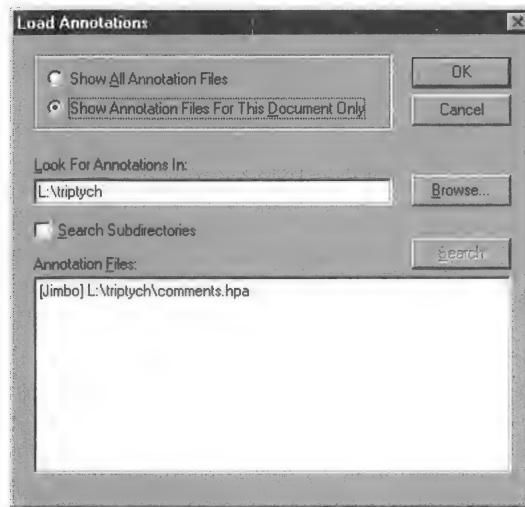
This dialog will help you find annotation files.

- In the **Look for Annotations In:** box, type the root folder to search for annotation (*.hpa*) files, or navigate to the folder by clicking the Browse button. You can search in folders within that folder by clicking in the **Search Subdirectories** check box.

Annotation files are created for specific documents, and are linked to those documents by SoftQuad H.*i.*P. . You can specify whether you want the H.*i.*P. Viewer to search for annotation files that pertain specifically to the document you are viewing, or to all annotation files by clicking on the appropriate radio button.

Once you have specified the folder to search in, and the parameters for the search:

- Click on the Search button.

This will begin searching the specified folder(s). The Search will turn into a Stop if you want to interrupt the search.

The annotation files found by the search will appear in the **Annotation Files** box, along with the name of the person who created the annotation. Once the search is complete:

- Choose the annotation file you want to load from the list and click on ⌐OK⌐ .

If you chose to search for annotations for this document only, the annotation file you selected will load into the Live TOC. Any item in the Live TOC with an annotation attached to it will be preceded by a small paperclip icon. If you loaded the annotations for viewing only, the paperclip will be gray. If you loaded the annotations for editing, it will be red.

If you chose to search for all annotation files, the annotation you choose from the list may not be related to the current document. If this is the case, you will get a warning that the annotations do not match the document, and you will be asked if you wish to load the annotations anyway, or to cancel the operation. You will also receive this warning if the annotation file was created for the document, but the document has been changed so that annotations no longer match the sections they refer to (e.g., a section was removed in the document).

In the case of our sample file, you should find an annotation file called *sample.hpa* that you can load. The file is write-protected so you won't be able to load it for editing, but you can create your own annotation to go with it.

> **Note** You can load more than one annotation file per document. If you do, the annotations from various files will be combined when you view the document.
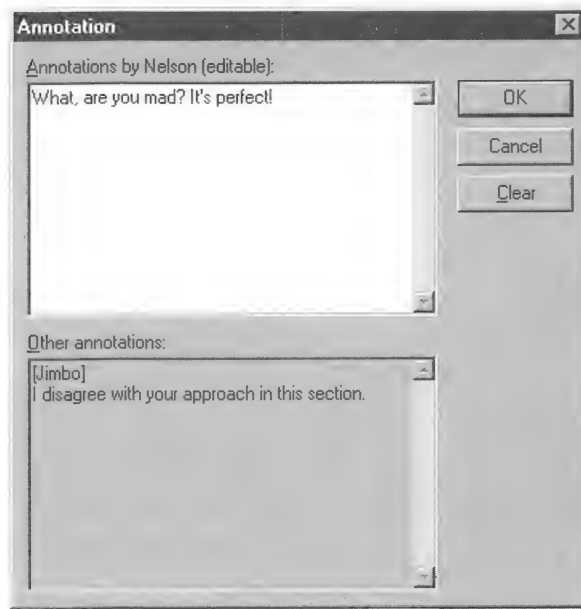
Viewing annotations

There are three ways to view an annotation:

1. Click on the paper clip beside the TOC entry.

2. Click on the [📎] (Annotation) toolbar button and choose **Add/Edit/View Annotation...** from the pop-up menu.

3. Right-click on the annotated TOC entry and choose **Add/Edit/View Annotation...** from the pop-up menu that appears.

This will bring up the annotation editor/viewer.

The annotation editor/viewer displays editable annotations (yours) in the upper window, and annotations made by other users in the lower window. Annotations by other users are identified by the name they have chosen in their H.i.P. Viewer's Options settings (see page 139).

Adding and editing annotations

You can add annotations to sections of the document defined in the TOC, or edit annotations that you've made. If you would like to edit an annotation file that you saved previously, open it by choosing Open for Editing... from the annotation pop-up menu. To add or edit an annotation:

- Select the section you want to annotate by clicking on its entry in the table of contents.
- Click on the [icon] (Annotation) toolbar button.
- Choose Add/Edit/View Annotation.
- In the top (Editable) box, enter the text of your annotation.
- Click on [OK].

If you haven't already saved an annotation in this session, a file save dialog box will appear.

- Choose the path and filename for your annotation file, then click on [Save] .

A red paper clip will appear beside the TOC entry that your annotation applies to. Any annotations that you make to the document during this session will automatically be saved to the file you chose with the first annotation.

> **Note** If you want others to be able to view your annotation file, you must make it publicly accessible; e.g., save it on a network drive.

Deleting and closing annotations

You can delete editable annotations to specific table of contents entries. To delete an annotation attached to a table of contents item:

- Right-click on the item in the table of contents.
- Choose **Delete Annotation** from the pop-up menu.

To remove annotations that you have loaded as *read-only* (usually annotations written by someone else):

- Click on the ▨ (**Annotation**) toolbar button.
- Choose **Close** to select a single annotation file from a fly-out menu. Or:
- Choose **Close All** to close all of the loaded annotation files.

Keeping track (subscribing)

The H.i.P. Monitor keeps track of all of the pages on your intranet, and you can ask it to notify you by email when pages that you're interested in change.

To do this, you *subscribe* to the page by clicking on the ▣ (subscribe) toolbar button. This brings up a pop-up menu from which you can choose to subscribe to the page you currently have loaded in the H.i.P. Viewer, pages on specific topics, or pages by certain people. To subscribe to the current page choose **This Page** from the pop-up menu. This will send a message to the H.i.P. Monitor, and open a new browser window with a message telling you whether your subscription was successful.

> **Note** You can subscribe only to topics or authors that reside on the monitored server. If you enter the user name of an author whose pages are on another server, the H.i.P. Monitor cannot inform you of page changes.

You can subscribe to pages on particular topics by either selecting them from a list or by entering a new topic. To subscribe by topic:

- Choose **Topics...** from the **Subscribe** pop-up menu.

The **Document Topics** list contains all of the topics that have been listed in current the H.i.P. document. You can subscribe to one or more topics in the **Document Topics** list:

- Click on the topic(s) you want to subscribe to in the **Document Topics** list.
- Click on Copy>> .

This will move the topics to the **Subscribe to** list.

You can also enter a new topic in the **New Topic** entry box, and click on Move >> to add it to the **Subscribe to** list.

To remove a topic from the **Subscribe to** list for editing or deleting:

- Click on the topic in the **Subscribe to** list.
- Click on Remove/Edit<< .

This will move the topic to the **New Topic** text box, where you can edit or delete it.

You can try this with the sample file. The file has several topics assigned to it. If the H.i.P. Monitor is running on your server, you can subscribe to one or more topics as described above.

You can subscribe to pages written by particular authors by either selecting them from a list or by entering a new author's name. To subscribe to pages by a particular author:

■   Choose **Authors...** from the **Subscribe** pop-up menu.

The **Document Authors** list contains all of the authors that have documents on the intranet. You can subscribe to one or more authors in the **Document Authors** list:

■   Click on the author(s) whose pages you want to subscribe to in the **Document Authors** list.

■   Click on [Copy>>] .

This will move the authors to the **Subscribe to** list.

You can also enter an author's name in the **New Author** entry box, and click on [Move >>] to add it to the **Subscribe to** list.

To remove an author from the **Subscribe to** list for editing or deleting:

■   Click on the author's name in the **Subscribe to** list.

■   Click on [Remove/Edit<<] .

This will move the name to the **New Author** text box, where you can edit or delete it.

To learn more about the H.i.P. Monitor, see the Monitor reference on page 375.

Welcome to the H.i.P. Editor

Welcome to the Editor component of SoftQuad HoTMetaL intranet Publisher (H.*i*.P.).

Purpose of the H.i.P. Editor

The H.*i*.P. Editor is part of SoftQuad H.*i*.P. . It is an editor for creating files that can be viewed using SoftQuad H.*i*.P. and other HTML browsers. The H.*i*.P. Editor's technology is based on SoftQuad's HoTMetaL PRO HTML editor, but in addition to creating regular HTML documents, it lets you create H.*i*.P. files, which use several extensions that can be displayed onlyy in the H.*i*.P. Viewer. These extensions include:

☐ One-to-many links: the user can click on a single location in one document and link to many locations or documents.

☐ Pop-up windows: contain simple text or HTML marked-up information.

☐ Multiple (cascading) style sheets for a single document.

☐ Multiple displays of a single document where parts of the document are selectively shown or hidden.

☐ Live tables of contents (Live TOCs): hypertext tables of contents, generated on-the-fly.

☐ User-defined extensions: define new elements to make document structures more meaningful.

The H.i.P. Editor works closely with the other components of SoftQuad H.i.P. to make it easy for you to create and manage your intranet site. With the H.i.P. Editor, you create files that are displayed with the H.i.P. Viewer plug-in for your Netscape Navigator or Microsoft Internet Explorer Web browser. While files created in the H.i.P. Editor conform to the HTML standard and have *.htm* or *.html* as their file extensions, they have certain additions that allow them to display differently from standard HTML files in the H.i.P. Viewer (see page 165.)

Because SoftQuad H.i.P. is composed of several integrated components, some of the H.i.P. Editor features will require you to understand the other components of H.i.P.. We recommend that you work through the tutorial book to better understand how the various components work together to create and manage your intranet.

About this manual

The H.i.P. Editor reference section of this manual consists of the following chapters:

– Welcome to the H.i.P. Editor.
– An explanation of the H.i.P. Editor interface.
– A guide to H.i.P. *extensions* to HTML.
– A quick reference to the *core elements* of HTML.
– A guide to common *extensions* to HTML.
– Chapters on each of the main areas of functionality:
    – Working with files
    – Markup
    – Spell-checking and thesaurus
    – Links
    – Images and image maps
    – The image editor

- Tables
- H.i.P. Editor display styles
- Searching and replacing
- Macros

Note If you haven't already read the Getting Started section (page 16), we suggest you do so now. It contains information on starting the H.i.P. Editor and important information about how the H.i.P. Editor works with the other components of SoftQuad H.i.P.

Using the H.i.P. Editor reference	The 'core' chapters of the H.i.P. Editor reference are *The H.i.P. Editor interface* (page 167), *Working with files* (page 241), *Marking up documents* (page 255), and *Links* (page 275).
	Even if you're familiar with HoTMetaL 2.0 or 3.0, you should read the *H.i.P. Editor interface*, *Core HTML* (page 199), *Extensions to HTML*, and *H.i.P Extensions* (page 217) chapters to become familiar with differences in the H.i.P. Editor user interface.
On-line help and other useful resources	The H.i.P. Editor manual is available on-line, by choosing the H.i.P. Help command from the Help menu.
	See also the file *readme.wri* for last-minute information on SoftQuad H.i.P. . This file is in the SoftQuad H.i.P. installation folder.

HTML reference

The help file also contains a detailed reference guide to all of the HTML elements and attributes. Choose the **HTML Reference Guide** command in the **Help** menu.

Tips and Tricks

This is a page of 'power-user' techniques that will speed up your work with the H.i.P. Editor. To see this page, choose **Tips and Tricks** from the **Help** menu.

Technical Reference

This is a page containing numerous URLs on Web topics: HTML references, styles guides, design tools, plug-ins, and programming tools. To see this page, choose **Technical Reference** from the **Help** menu.

Sounds and images

The *M_Media* and *images* folders in the SoftQuad H.i.P. installation folder contain sound and image files, respectively. The images folder subfolders containing different types of images (e.g., animated images, backgrounds, bullets, etc.). All of these files are in the public domain and can be used freely in web pages.

> **Note** The sounds and images are an optional part of the SoftQuad H.i.P. installation. If you want to use any of these files, but didn't install them, you should reload your SoftQuad H.i.P. CD and do so. You can also access the sound and image files directly from the CD.

A note about
file formats

Although H.i.P. documents are HTML documents, there is some special HTML markup included in a H.i.P. document so that the H.i.P. Viewer will display the document with all the H.i.P. Viewer features.

You can use plain HTML documents in your H.i.P. projects, but in order to view the document with H.i.P. features—such as Live Tables of Contents, views, and annotations—in the H.i.P. Viewer, you need to convert documents to SoftQuad H.i.P. format. This does not alter the content of the document; 'H.i.P.-ification' just adds some special HTML markup that tells the H.i.P. Viewer plug-ins to start when you load the document into your Web browser. You can H.i.P.-ify your documents on a project level from the H.i.P. Information Manager (see page 56) or as you create and edit them in the H.i.P. Editor (see page 249).

You can learn the technical details (useful if you are automating intranet publishing) about the file formats used by SoftQuad H.i.P. in the *File and Markup Formats* appendix (page 413).

> **Note** HTML is an application of Standard Generalized Markup Language (SGML). SoftQuad H.i.P. documents conform to the HTML 3.2 proposal.

The H.i.P. Editor interface

This chapter explains the basics of how to use the H.i.P. Editor. It contains sections on the following topics:

- Document properties
- Moving between documents
- Toolbars
- Pop-up menus
- Options
- Showing or hiding tags
- Setting the H.i.P. Editor folder
- Important features: *Find and Replace* URL and *Macros*
- Some common error messages

If you are new to the H.i.P. Editor, you should certainly read this chapter, since it will help you get acquainted with the product and learn about the components and procedures you'll need to get your work done.

Using the interface

There are many ways to insert and edit markup and text in the H.i.P. Editor. Commands can be chosen in four ways:

1. Toolbars: clicking on a toolbar button manipulates files or inserts and edits markup. See page 175.

2. Menus: pull-down menus in the H.i.P. Editor menu bar give access to all commands.

3. Keyboard shortcuts: many common the H.i.P. Editor commands are linked to a keyboard shortcut, shown in the menus. See also the command reference card.

4. Mouse shortcuts: a right-button mouse click will bring up context-sensitive menus that allow you to cut, copy, paste, select elements, insert elements, edit element attributes, and view or edit documents and images. (See page 177 for more details.)

Overview of menus

This section provides a summary of the main features.

☐ **File** menu: file manipulation; e.g., opening and saving files, converting to and from H.i.P. format, setting document properties.

☐ **Edit** menu: cutting and pasting, find and replace, spell checking, merge/remove annotations.

☐ **View** menu: local display formatting; show and hide tag items; view source file.

☐ **Markup** menu: inserting and changing markup, creating and editing anchors.

☐ **Format** menu: text style, alignment, and color; backgrounds.

☐ **Tools** menu: image, table, and frame editing; accessibility tools; find and replace URLs.

☐ **Forms** menu: inserting and editing forms.

☐ **Special** menu: checking document conformance, creating and running macros, options.

☐ **Window** menu: appearance and control of document windows.

☐ **Help** menu: on-line help, other help documents.

Dragging and dropping text and objects

The H.*i*.P. Editor supports *dragging and dropping*. This makes it easy to create links to images, other H.*i*.P. pages, and non-hypertext files with a simple mouse movement. As well, you can move and copy text within the H.*i*.P. Editor by dragging and dropping. If you have applications that support OLE—Microsoft's standard for linking across applications—you can drag and drop text between those applications and the H.*i*.P. Editor.

To drag a document or image file into a H.*i*.P. Editor document (thereby creating a link to it):

- Switch to the Windows desktop or Windows Explorer.
- Move and resize the document and application windows so that you can see both the H.*i*.P. Editor window and the file that you want to drag.
- Select the file by clicking and holding the left mouse button on the file's icon.
- Continuing to hold down the left mouse button, move your mouse cursor to the H.*i*.P. Editor window.
- Release the left mouse button wherever you want the link to appear.

When you release the mouse button, an **A** or **IMG** element will be created; its URL will point to the file that you just dragged. If you release the left mouse button at a point where an anchor or image would be invalid, nothing will happen. You'll have to drag the file again, and drop it at a valid location. If the H.*i*.P. Editor can't create valid markup, nothing will happen. You'll have to drag and drop the text again to a valid location.

To move text, elements, or images *within* the H.*i*.P. Editor:

- Highlight the text or object that you want to move.
- Position the mouse cursor over the selection, then press and hold the left mouse button. The cursor will change to the special drag and drop move cursor.
- Move your mouse cursor to wherever you want this selection to be moved and release the left mouse button (an I-bar insertion cursor will follow the mouse movement).

If you release the left mouse button at a point where the selection would be invalid, the H.*i*.P. Editor will attempt to insert markup to make the drag and drop action work; for example, the H.*i*.P. Editor will insert a **P** element if you are dragging and dropping text to a location inside the **BODY** but not inside any other element. If the H.*i*.P. Editor can't create

valid markup, nothing will happen. You'll have to drag and drop the text again to a valid location.

To copy, instead of moving, follow the same sequence of mouse movements, but hold down the ⟨Ctrl⟩ key at the same time.

To move text between *other applications* and the H.*i*.P. Editor:

- Position your application windows so that you can see both the H.*i*.P. Editor window and the other application window.

- Select the text that you want to move.

- Position your mouse cursor over the selection and drag the text to the H.*i*.P. Editor window by pressing and holding the left mouse button (holding down the ⟨Ctrl⟩ key if you want to copy and not move the text).

- Drop the text by releasing the left mouse button wherever you want it to go. If you release the left mouse button at a point where text would be invalid, the H.*i*.P. Editor will attempt to insert markup to make the drag and drop action work. If the H.*i*.P. Editor can't create valid markup, nothing will happen. You'll have to drag the text again and drop it at a valid location.

Undoing and redoing actions

The Undo command in the Edit menu lets you undo operations sequentially according to the number of operations you have set the H.*i*.P. Editor to undo in the Options dialog box.

Typing text, and any command that changes the content of the document, can be undone. Note the following actions that cannot be undone:

- ☐ Scrolling and windowing commands
- ☐ Text selection
- ☐ Undo itself (it can be undone with Redo)
- ☐ Edit Dictionary... and other operations that affect the user dictionary
- ☐ Any actions performed prior to the last time the document was saved cannot be undone.

If you execute several Undo commands in a row you will undo the most recent action, and then undo the second most recent action, and so forth. By default, you can undo the last 30 actions. You can change the default

undo limit in the **Defaults for New/Open** section of the **Options** dialog box.

To reverse an **Undo**, you must use **Redo**. If you have performed several **Undos**, you can reverse each of them by performing an equal number of **Redos**. If you perform one or more **Undos**, and then perform an undoable action, you will no longer be able to redo any of the **Undos**.

If you undo a **Copy** or **Cut** command, the previous contents of the clipboard will be restored.

Selecting, copying, cutting, and pasting

Since the H.i.P. Editor is a structured editor, you can easily select and move around parts of the document structure without having to worry about making the markup invalid.

It is easy to select a whole element (and its sub-elements, if any). There are three ways to do this:

☐ Put the insertion point just to the left of the start-tag and drag to the right, over the start-tag. (Similarly, you can put the insertion point to the right of the end-tag and drag to the left.)

☐ Click once on the start- or end-tag, and the element is selected.

☐ Choose **Select Element** from the **Edit** menu, or right-click inside an element and choose **Select Element** from the pop-up menu. The keyboard shortcut for this command is (Ctrl+T) .

To select several consecutive elements, put the insertion point just to the left of the start-tag of the first element that you want to select, and drag down and/or to the right, as appropriate. (Similarly, you can put the insertion point just to the right of the end-tag of the last element, and drag up and/or to the left.)

If you start dragging *inside* an element, the H.i.P. Editor will not let you drag past the start- or end-tag of that element. For example, if you have an OL list, and you put the insertion point to the left of one of the (LI ⟩ start-tags and drag down, you cannot drag past the ⟨ /OL] end-tag.

The **Cut** ((Ctrl+X)), **Copy** ((Ctrl+C)), **Paste** ((Ctrl+V)), and **Delete** ((Del)) commands work as they normally do in word-processing applications. The only exception to this is that in the H.i.P. Editor, a selection can con-

tain elements. For this reason there will be circumstances where removing or pasting a selection would cause the document to be incorrectly marked up.

If you try to do a paste that would cause the markup to become invalid, you will get a warning dialog box that gives you the opportunity to turn rules checking off if you want to continue with the paste. There are some circumstances in which you will never be able to do a paste, such as when the insertion point is inside an IMG element, which cannot contain text or markup.

Cut and Delete will be disabled if you select one of the elements HTML, HEAD, or BODY.

If you choose Select Element, the current element, including its start- and end-tags, will become highlighted.

To perform the equivalent of 'Select All' on a document, place your cursor inside the HTML element (but not inside any other element) and choose Select Element from the Edit menu.

Previewing your file in a browser

If you want to see what your document will look like in a browser or the H.i.P. Viewer, click on one of the preview toolbar buttons in the third toolbar. These four buttons are in a group at the right end of the toolbar. When you installed SoftQuad H.i.P., it asked you for the location of your browser(s) to install the H.i.P. Viewer plug-in files. The first preview toolbar button will contain an icon for the primary browser for which the H.i.P. Viewer was installed, and the second will contain an icon for the secondary browser if you installed the H.i.P. Viewer for it as well.

The other toolbar buttons will be blank. You can configure these buttons to launch other, non-H.i.P. browsers (e.g., Mosaic) to view standard HTML documents that you have created. If you click on a blank button, you'll get a file chooser dialog box that lets you locate and choose a Web browser. When you have selected the browser in the file chooser dialog box, the blank toolbar button will contain an icon representing that browser. All future previewing can be done with one click on that toolbar button. If the browser that you chose is currently open, the document will be opened in that application's window—a new copy of the browser will not be launched.

Note If you have not H.i.P.-ified your document (see page 249), your file will be previewed as plain HTML in your Web browser. If you have H.i.P.-ified the document, the H.i.P. Viewer plug-ins will start when your browser loads the H.i.P. format document.

You can also preview documents without using the toolbar.

- Choose **Preview...** from the File menu, or type [Ctrl-M] at the keyboard.
- Select a browser from the list and click on the [Preview] button.

The browser is launched, displaying your document. If your document hasn't been saved, you will be given the choice of saving it and previewing, saving it as a temporary file and previewing, or cancelling the operation.

To change the browser associated with a toolbar button, you must choose **Preview...** from the **File** menu and delete the browser from the browser list. The toolbar button will become blank; a new browser can be selected either from the **Preview** dialog box, or by clicking on the blank toolbar button.

If you want to add a browser to the list in the preview dialog:

- Choose **Preview...** from the **File** menu, or type [Ctrl-M] at the keyboard.
- Click on the [Add...] button.
- Use the file chooser dialog box to navigate to the location of the browser and select it.

To delete a browser from the list:

- Select it in the list.
- Click on the [Delete] button.

Previewing a document with this command is the same as saving the file with the H.i.P. Editor, launching the browser independently of the H.i.P. Editor, and then opening the file with the browser.
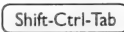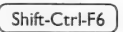
The current element

The name of the current element (the one containing the insertion point or selection) is displayed in the 'mini-context area', which is immediately to the left of the horizontal scrollbar at the bottom of the document window.

BODY

You can change the width of the mini-context area in the **Defaults for New/Open** section of the **Options** dialog: enter the desired width in pixels. Certain settings for the current element—such as URLs and **Name** attributes—appear in the lower left-hand corner of the display window, under the mini-context area.

Moving between documents

If you have more than one document open in the H.i.P. Editor, you can move between the open documents in a variety of ways. The **Window** menu contains a list of open documents in the order that you opened them, and you can choose whichever one you want to edit from this menu. You can move through the open documents in in the order that you last viewed them using **Next File** and **Previous** commands in the **Window** menu. You can also use the ⟨⇦o⟩ (**Back**) and ⟨o⇨⟩ (**Forward**) toolbar buttons. These commands are also linked to the standard Windows keyboard commands:

☐   Ctrl-Tab or Ctrl-F6 (**Next**)
☐   Shift-Ctrl-Tab or Shift-Ctrl-F6 (**Previous**)

The H.i.P. Editor lets you move between documents by following local links. If you have an anchor that points to a file on your PC, right-clicking on this anchor will display a pop-up menu that contains the choices **Edit** and **View**. Choosing **Edit** will open the document in the H.i.P. Editor for editing (if it's not already open). Choosing **View** will preview this document using the H.i.P. Viewer. (However, you cannot use the H.i.P. Editor to retrieve files over the Web.) These commands are also available from the **Tools** menu.

Following links within a document

If a document has an anchor that points to a specific location in the same document, you can jump to that location as follows:

- Right-click on the anchor.
- Choose **View** from the pop-up menu that appears.

Alternatively, you can click once on the anchor and then choose **View...** from the **Tools** menu.

The H.i.P. Editor then scrolls to the location that the anchor points to.

Toolbars

The H.i.P. Editor has four toolbars, which are located just below the menu bar by default. The top toolbar (referred to as the 'Standard' toolbar) provides quick access to a number of frequently-used menu commands. The second ('Common HTML') toolbar is for creating the more common HTML elements and editing common attributes; the third ('Other HTML') toolbar is for creating the less common HTML elements; and the fourth ('Forms') toolbar is for inserting form elements, other HTML markup, and some H.i.P. extensions. A *tooltip*, a short description of what a button does, will appear if you position the mouse pointer above it. Tooltips can be shown or hidden; turn the **Show Tooltips** command on or off in the **General** section of the **Options** dialog box.

All four toolbars can be 'torn off': just click anywhere on the toolbar's background and drag it to wherever you want. When a toolbar is torn off, it becomes a two-column 'palette'. To change the palette back to a toolbar, click on its title bar and drag it back to its default location. The **Toolbars...** command in the **View** menu lets you choose which toolbars should be visible. You can dismiss a palette by double-clicking on the control button in its upper left corner.

'Standard' toolbar icons

- ☐ New... (see page 241)
- ☐ Open... (see page 242)
- ☐ Save (see page 249)
- ☐ Print... (see page 251)
- ☐ Document properties (see page 63)
- ☐ Back... (see page 174)
- ☐ Forward... (see page 174)
- ☐ Cut (see page 171)
- ☐ Copy (see page 171)
- ☐ Paste (see page 171)
- ☐ Undo (see page 170)
- ☐ Redo (see page 171)
- ☐ Find and Replace... (see page 357)
- ☐ Find Next (see page 358)
- ☐ Check Spelling... (see page 295)
- ☐ Thesaurus... (see page 300)
- ☐ Hide Tags (see page 182)
- ☐ Insert Element... (see page 261)
- ☐ Remove Tags (see page 266)
- ☐ Validate Document (see page 271)

'HTML' toolbar icons

When you click on a button in one of the HTML toolbars, the H.i.P. Editor will insert an element or change the current element type, as appropriate. See the section *Using the toolbars to create markup* (page 259) for more information.

Pop-up menus

Part of the H.i.P. Editor's interface is a context-sensitive menu that appears when you right-click in the H.i.P. Editor document window. This menu changes depending on where you click. There are four different menus that can appear: the *Default* pop-up menu, the *Anchor* pop-up menu, the *Image* pop-up menu, and the *Object* pop-up menu.

Default pop-up

Cut
Copy
Paste
Insert Element...
Select Element
Element Attributes...
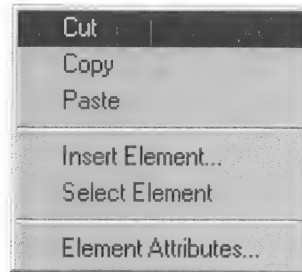
The *Default* pop-up menu gives you easy access to some commonly used the H.i.P. Editor commands:

□ The standard text and object manipulation commands: **Cut, Copy,** and **Paste.**

□ **Insert Element:** Allows you to insert HTML elements (see page 261).

□ **Select Element:** Selects the current element (see page 172).

□ **Element Attributes:** lets you edit the current element's attributes (see page 267).

'Anchor' pop-up

Cut
Copy
Paste
Edit...
View...
Insert Element...
Select Element
Element Attributes...
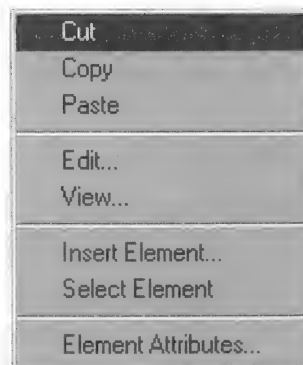
The *Anchor* pop-up menu appears when you right-click inside an anchor element. It has all of the default commands, plus two that are specific to anchors:

☐ **Edit:** Opens the document specified in the anchor in the H.i.P. Editor. If the document cannot be found, an error dialog will be displayed. If the document is not on a local file system, this command is disabled.

☐ **View:** Launches the document specified in the anchor for viewing in the H.i.P. Viewer. If the anchor links to a H.i.P. document, the default browser should be the browser with the H.i.P. Viewer plug-ins installed.

'Image' pop-up
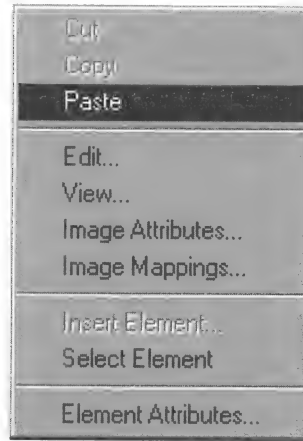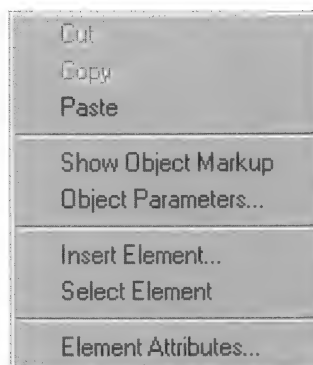

The *Image* pop-up menu appears when you right-click inside an image (IMG) element. Clicking inside an INPUT element of type 'image' also brings up this pop-up menu. In this menu, several commands are disabled, because you can't cut, copy or insert an element within an image. The View... command displays the image in the default image viewer, and the Edit... command brings up the image in the default image editor (both are usually MetalWorks; see page 321). There are two more commands in this menu that are specific to images:

☐ **Image Attributes**: brings up the Image Attributes dialog box (see page 304).

☐ **Image Mappings**: launches the image mapping program (see page 308).

'Object' pop-up

Cut
Copy
Paste
Show Object Markup
Object Parameters...
Insert Element...
Select Element
Element Attributes...

The *Object* pop-up menu appears when you right-click inside an ActiveX or other object element (see page 231). In this menu, several commands are disabled, because you can't cut or copy from within an object. The **Paste** command pastes an element or Internet Control (*.ocx*) file from the clipboard. There are two more commands in this menu that are specific to images:

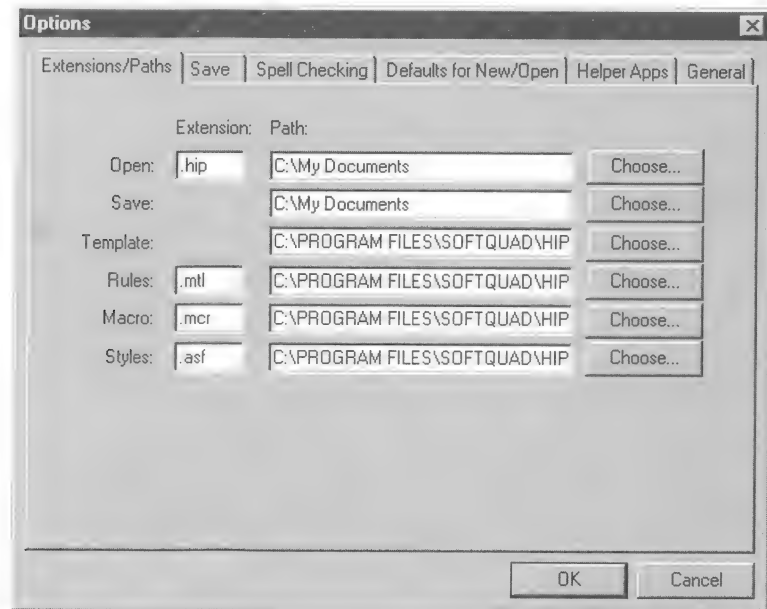☐ **Show Object Markup:** replaces the default graphical view of the object with a text view of the **OBJECT** element. When you choose this option the menu item will change to **Show ActiveX Control**, allowing you to toggle back to the graphical view of the object.

☐ **Object Parameters:** opens the **ActiveX Control Attributes** dialog box the same way as choosing **Object Parameters...** from the **Markup** menu.

Options

You can configure many aspects of the H.i.P. Editor's behavior using the Options... command in the Special menu. This command lets you configure:

☐ Paths (folders) and file extensions

☐ Save options (line breaks, backups, and auto-saving)

☐ Spell checking dictionaries

☐ Defaults for new files: show head element, comments, document author name

☐ Helper applications for viewing and editing non-HTML files

☐ General options: tag icon font and color, size text to window, markup options, document properties prompting.

The Options dialog box is divided into sections, in 'card file' style. To choose a section, click on its 'tab' with the mouse.

Options					✕
Extensions/Paths	Save	Spell Checking	Defaults for New/Open	Helper Apps	General

	Extension:	Path:	
Open:	.hip	C:\My Documents	Choose...
Save:		C:\My Documents	Choose...
Template:		C:\PROGRAM FILES\SOFTQUAD\HIP	Choose...
Rules:	.mtl	C:\PROGRAM FILES\SOFTQUAD\HIP	Choose...
Macro:	.mcr	C:\PROGRAM FILES\SOFTQUAD\HIP	Choose...
Styles:	.asf	C:\PROGRAM FILES\SOFTQUAD\HIP	Choose...

OK   Cancel

The options are documented in the sections on the features they affect. If you want to find information on a specific option, look under 'options' in the index.

Pinning dialog boxes

Most of the H.i.P. Editor dialog boxes will be dismissed once you perform an action in them (clicking on [Apply] , [OK] , [Insert Element] , etc.). You may find some dialog boxes more convenient to use if you *pin* them to the screen, as follows:

- Click and release the right mouse button on the title bar of the dialog (if you're using Windows NT, click once on the button in the upper left corner of the dialog).
- Choose Pin from the menu that appears.

A pinned dialog box will stay up on the screen after you perform an action. You can move the dialog to a convenient location on the screen so that it doesn't cover part of the document window.

Showing and hiding tags

By default, the HTML tags in your document will appear on the screen as small tag icons. The tags that point to the right are *start-tags*, indicating the beginning of an element, while those that point to the left are *end-tags*, indicating the end of an element. If you choose Hide Tags in the View menu, the tags will be hidden. The command will then toggle to Show Tags: choosing this command will display the tags again. The toolbar button is equivalent to this command. You can configure the H.i.P. Editor to show or hide tags by default in the Defaults for New/Open section of the Options dialog box.

You can set the colors of the tag icon (foreground and background) and the size and font of the tag text in the General section of the Options dialog box.

Showing and hiding the Head element

The HEAD element in a H.i.P. document is hidden by default. The elements inside the HEAD element (i.e., LINK, META and SCRIPT) carry out important functions in H.i.P., but it is not always necessary for the document author to see them. If you want to see the contents of the HEAD element, choose **Show Head Element** from the **View** menu. The command will then toggle to **Hide Head Element**. You can configure the H.i.P. Editor to default to show the HEAD element in the **Defaults for New/Open** section of the **Options** dialog.

> **Note** The SCRIPT element that is used to identify H.i.P. documents is not displayed in the H.i.P. Editor.

To define the information contained in the HEAD element, such as the document title and any LINK elements to user-defined extensions (UDEs), Live TOCs, and style sheets or publishing information contained in META elements, choose **Properties** from the **File** menu or click on the toolbar button.

Showing and hiding comments

Comments are a special type of HTML markup, and do not appear when a document is viewed in the H.i.P. Viewer. They are often used to make remarks on the document that can be useful for Web developers and content creators. You can show or hide comments within the H.i.P. Editor. If you choose **Hide Comments** in the **View** menu, comments will be hidden. The command will then toggle to **Show Comments**; choosing this command will display the comments again. You can configure the H.i.P. Editor to show or hide comments by default in the **Defaults for New/Open** section of the **Options** dialog box.

Comment *tags* are displayed and hidden by the **Show/Hide Tags** command in the same way that element tags are.

Viewing the source document

Sometimes it is convenient to be able to see the current document in plain text format, so you can see what the markup looks like in the 'raw' document. The H.i.P. Editor lets you easily look 'under the hood' at documents in this format. To do this:

- Choose **View Source** from the **View** menu.

This will open a new document window with a text version of your document. This document is *read-only*, i.e., you cannot edit it. You can switch back and forth between the graphical and text display by moving between documents (see page 174).

Viewing the source of the document opens a new document window. To close the source document, choose Close from the File menu, or double-click on the control button to the left of the File item in the menu bar.

> **Note** The SCRIPT element that is used to identify H.i.P. documents is not displayed when you use View Source in the H.i.P. Editor.

Setting the H.i.P. Editor folder

You need to follow the steps in this section *only if* you are running a copy of the H.i.P. Editor executable file (*hipedit.exe*) that is not in the folder where you installed H.i.P. In this situation, the H.i.P. Editor will not be able to find the various auxiliary files and folders that it needs to run (rules folder, styles folder etc.). You must explicitly inform the H.i.P. Editor of the location of the H.i.P. Editor folder.

If you are running Windows 95:

☐ Using Windows Explorer, create a shortcut for the H.i.P. Editor.

☐ Click on the shortcut with the right mouse button.

☐ Choose

☐ from the menu that appears.

☐ In the **Properties** dialog box, click on the **Shortcut** tab.

☐ In the **Target** text box in this dialog, add the *-sqdir* option followed by the name of the H.i.P. Editor folder. For example:

```
"C:\SoftQuad\HiP\hipedit.exe" -sqdir c:\hipedit
```

The path must be in quotes if it contains spaces.

☐ Click on the ⬚OK⬚ button.

Double-clicking on the shortcut will launch the H.*i*.P. Editor with the *-sqdir* option set to a different folder.

If you are running Windows NT:

☐ Click once on the H.*i*.P. Editor icon.

☐ Choose the **Properties...** command in the Windows **File** menu.

☐ A dialog box will appear. In the **Command line** text box in this dialog, add the *-sqdir* option followed by the name of the the H.*i*.P. Editor folder. For example:

```
c:\special\hipedit.exe -sqdir c:\hipedit
```

Macros

If there are sequences of commands that you frequently type in while editing in the H.*i*.P. Editor, you may find it convenient to create a keyboard shortcut—called a *keyboard macro* or simply a *macro*—to make your work easier. There are some useful macros that come with the H.*i*.P. Editor, and you can make your own personal ones. See page 369 for details.

Document properties dialog

One of the most important features of SoftQuad H.*i*.P. is the **Document Properties** dialog. This dialog is accessible both from the H.*i*.P. Information Manager and from the H.*i*.P. Editor. From the Editor, use the **Properties...** command in the **File** menu, or the 📋 button in the H.*i*.P. Editor toolbar.

This dialog gives you access to many of the features that make H.*i*.P. so effective for document management and information delivery: e.g., *user-defined extensions* (UDEs), *live tables of contents* (Live TOCs), and *cascading style sheets*.

The properties dialog is fully documented in the H.*i*.P. Information Manager section of the manual (page 63).

By default, the H.*i*.P. Editor will prompt you to edit the document properties when you save a file for the first time using the **Save** or **Save As...** command. You can turn off the prompting in the **General** tab of the **Options** dialog (see page 249).

For more information...

Keep in mind that SoftQuad H.*i*.P. makes the most of HTML. While we have tried to provide sufficient reference material on HTML basics, our 'Technical Reference' page has many URLs for documents that contain information on HTML usage. This file can be accessed by choosing **Technical Reference** in the H.*i*.P. Editor **Help** menu.

Our own tutorial on using HTML can be found in the Tutorial book, *Using H.i.P.* A number of HTML tutorials, of varying quality, are also available on the Web.

The relevant Usenet newsgroups (those in the *comp.infosystems.www* hierarchy) are a source of information, including an FAQ (Frequently Asked Questions) list.

SoftQuad's on-line Support Center is available for registered H.*i*.P. Editor users from the SoftQuad home page (*http://www.softquad.com/*). It contain answers to frequently asked questions, particularly those that concern auxiliary technologies such as browsers.

Our Tutorial book, *Using H.i.P.*, is also an essential resource for understanding how SoftQuad H.*i*.P. works as a package, combining the H.*i*.P. Editor, the H.*i*.P. Information Manager, the H.*i*.P. Viewer and the H.*i*.P. Monitor. We strongly urge that you work through this tutorial to fully understand the capabilities of the H.*i*.P. Editor and the H.*i*.P. extensions beyond standard HTML.

H.i.P. Extensions

As we've mentioned, SoftQuad H.i.P. is based on HTML. If you are not familiar with HTML, read the chapter *Core HTML* (see page 199) before you continue with this chapter.

This chapter explains how SoftQuad H.i.P. uses the most advanced aspects of HTML to allow you to create special markup that will display in the H.i.P. Viewer. Some of these can be put into your H.i.P. documents using the H.i.P. Editor the same way you would include any other markup:

☐ Inline and block pop-up windows.

☐ One-to-many links.

☐ Annotations.

Other extensions to H.i.P. documents are created using utilities launched from the H.i.P. Document Properties dialog (see page 63):

☐ User defined extensions (UDEs).

☐ Live tables of contents (TOCs).

☐ Information used by the H.i.P. Monitor.

☐ Cascading Style Sheets and multiple views of single documents.

These extensions are explained fully in the H.i.P. Information Manager reference (starting at page 63).

Note While H.i.P. documents conform to the HTML 3.2 DTD, they also use some element attributes in special ways to represent H.i.P. specific features. You cannot open a H.i.P. document with H.i.P. extensions in a frames-capable, JavaScript capable browser without the H.i.P. Viewer plug-ins. Older browsers may display the document as regular HTML.

Pop-up windows

A H.i.P. document can contain pop-up windows that are represented as icons in the H.i.P. Viewer document window. Pop-ups can either be block or inline. You can insert a pop-up by clicking on the [icon] toolbar button. If the insertion point is inside a block element such as P or LI, inserting a pop-up will result in an inline pop-up; otherwise it will result in a block pop-up.
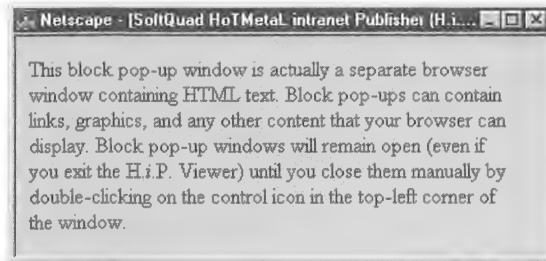
Block pop-ups

Block pop-ups are block elements (see page 236) and will be set apart from the other text and displayed in the H.i.P. Viewer as:

Block pop-ups can contain HTML markup. When the user clicks on this icon, the pop-up will be displayed in a new document window. To insert a block pop-up into your document:

- Put your insertion point where you want the pop-up icon to appear; it must be *outside* any other block element (e.g., P or DIV).

- Click on the [icon] toolbar button or choose BlockPopup from the Markup menu.

- Inside the BlockPopup element, you can enter the text you want contained in the pop-up window. This text can contain HTML markup. A block pop-up will look something like this in the H.i.P. Viewer:

If you want to use a different icon to represent a block pop-up, you can do so for an entire document or for an individual pop-up. To set a different pop-up icon for the *entire document*, you must put a LINK element in the HEAD of your document:

- Put the insertion point inside the HEAD element at the top of your document (if the HEAD element is not displayed, choose Show HEAD Element from the View menu).
- Click on the ☐ (Head Elements) toolbar button and hold down the mouse button.
- Choose LINK from the pop-up menu.
- Choose Element Attributes... or type F6 .
- Set the REL attribute to SQ-HIP-BLOCKPOPUP .
- Set the HREF attribute to the URL of the icon graphic (this can be a complete URL or a filename).

To assign a different icon for a *particular pop-up*:

- Insert an IMG element inside your BlockPopup element (see page 303 for more on working with images).
- Specify the image file as you normally would.
- Choose Element Attributes...

- In the CLASS field of the Image Attributes dialog box, enter: BLOCK-POPUP.

The H.*i*.P. Viewer will then use the image file that you specified as the icon for this pop-up.

Inline pop-ups

Inline pop-ups are contained in block elements and are displayed as a small 🗩 icon in the H.*i*.P. Viewer. To insert an inline pop-up into your document:

- Put your insertion point where you want the pop-up icon to appear; it must be *inside* a block element (e.g., P or LI).

- Click the 🗩 (Insert pop-up) toolbar button or choose InlinePopup from the Markup menu.

- Inside the InlinePopup element, you can enter the text you want contained in the pop-up window. This text may not contain HTML markup. If you include HTML markup in an inline pop-up, the markup will be ignored by the H.*i*.P. Viewer. The following is an example of an inline pop-up in the Viewer:

Inline pop-ups give plain text information.
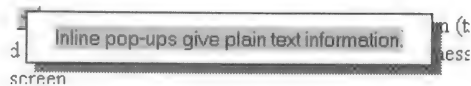
One-to-many links (multilocs)

H.*i*.P. documents can display links from a single location to many other documents or document locations. These links are called *one-to-many links* or *multilocs*. A multiloc appears as a small ▨ icon in the H.*i*.P. Viewer. When the user clicks on the icon, a pop-up menu will appear, displaying all of the links accessible from that single location. In the H.*i*.P. Editor, a multiloc is a type of list, which consists of one or more LIs. Just as when you create any other link, the links inside a multiloc must consist of A elements (inside the LIs). To create a multiloc:

- Choose **Insert Multiloc** from the **Markup** menu, or click on the ▨ toolbar button. This inserts a Multiloc element containing an A element within an LI element.
- Place the insertion point inside the A element and choose **Edit URL...** from the **Markup** menu.
- Enter the information for the URL in the dialog box (see page 275 for more on entering URLs).
- Insert a second LI element and place the insertion point inside the LI element.
- Choose **Insert Anchor...** from the **Markup** menu or click on the ▨ toolbar button.
- Edit the URL of the second A element.

You can do this as many times as you like.

To make categories of links more obvious, you may want the H.*i*.P. Viewer to insert separator bars between multiloc entries. To do this, put a blank LI element between two LI elements containing anchors.

Nesting multilocs

You can create *nested* multilocs, which will produce a heading with a fly-out menu of links in your multiloc pull-down menu. To create a nested multiloc:

- Place the insertion point inside a LI element in a multiloc Multiloc element.

- Click on the ▣ toolbar button. This inserts a second Multiloc element containing a LI element. Note that this is contained *within* the LI element in the first multiloc.

- Just to the left of the new Multiloc tag (i.e., in the LI of the first Multiloc), type a heading for the group of nested URLs. This will create a heading with an arrow pointing to a fly-out menu in the multiloc menu.

- Create a list of anchors as described earlier.

You can nest multilocs to as many levels as you need.

User-defined extensions (UDEs)

User-defined extensions (UDEs) are a way of creating your own, special HTML elements based on existing HTML elements. These special elements can be processed differently than their "base elements", e.g., used in a Live TOC or formatted in a *style sheet*. This makes the markup of a document more meaningful since you can use elements that more clearly describe their content. For example, you might normally put a warning or caution note in a BLOCKQUOTE element to set it off from the surrounding text in a standard HTML document. But your browser doesn't distinguish it as warning text; it's just a BLOCKQUOTE. With SoftQuad H.i.P., you can define an element called 'WARNING' that you know will contain any warning or caution notes. This is important for many features of H.i.P., including creating and editing Live TOCs (create a Live TOC that just displays WARNING elements), and creating cascading styles (e.g., making the text in the WARNING UDE red).

Use the H.i.P. Document Properties dialog (see page 63) to add, remove, or edit UDEs for the document you have open in the H.i.P. Editor (see page 79). Once you have attached a UDE definition file for the document, you will be able to choose any elements it defines from the Insert Elements dialog box.

Live tables of contents (Live TOCs)

Live TOCs are the tables of contents displayed by the H.*i*.P. Viewer as it loads H.*i*.P. documents. Every document has a default live TOC (the **Full Tree View**). The default live TOC includes all of the heading (H1–H6) elements. You can define additional live TOCs, based on other elements or UDEs. You can attach these permanently to your document from the H.*i*.P. Editor using the **H.*i*.P. Document Properties** dialog (see page 63). You can also create, edit, and load temporary live TOCs from the H.*i*.P. Viewer (see page 144).

Tips for creating Live TOCs

Live TOCs can be a powerful way of gathering information for your document readers since you can create Live TOCs based on any HTML element or UDE in the document. Here are a couple of points about Live TOC behavior that you should be aware of so you can make the most of them:

☐ *Live TOCs and classes*: A Live TOC treats any element with a CLASS attribute as a UDE (since UDEs are really just elements with a specific CLASS attribute defined by a separate file). This means, however, that if you have an H3 element with a CLASS attribute of SpecialMention and your Live TOC includes H3s, then none of the H3s with the class attribute will appear in the Live TOC. In order to have these appear in the Live TOC, you must include the UDE SpecialMention.

☐ *Live TOC hierarchy*: If you haven't defined any Live TOC items, the H.*i*.P. Viewer automatically chooses H1-H6. The hierarchy is not absolute, that is, if you have only H1 elements and H4 elements in your document, the Live TOC will nest the H4 Live TOC items directly under the H1s, ignoring any missing intermediate levels. This will not happen if the headings are contained within a DIV element, since H.*i*.P. doesn't want to mess up the use of DIV elements to create hierarchy. If you *have* created a Live TOC for a document, the hierarchy of elements in the Live TOC is relative only to the elements defined in the Live TOC; it is not based on the document as a whole, and will also skip any missing intermediate levels.

Please see the H.*i*.P. Information Manager documentation for a complete explanation of Live TOCs (page 85) and how to attach them to your H.*i*.P. documents (page 71).

H.i.P. Monitor settings in your document

The H.i.P. Monitor helps you to manage your intranet by monitoring pages and sites for specified events. Using the **Properties...** command in the **File** menu, you can configure H.i.P. to update and publish pages according to information contained in META elements in your document.

■ Choose **Properties...** from the **File** menu or click on the ▨ toolbar button.

This brings up the **H.i.P. Document Properties** dialog. Most of the information (with the exception of **Title** and **UDE**) that you enter in the **General** and **Effective Dates** tabs is used by the H.i.P. Monitor. Please see the H.i.P. Information Manager reference for information on H.i.P. Monitor settings in the **H.i.P. Document Properties** dialog **General** tab (page 65) and **Effective Dates** tab (page 66).

Styles and views

SoftQuad H.i.P. lets you define your own styles for viewing H.i.P. documents. Rather than having the appearance of your document determined solely by the browser, you can use Cascading Style Sheets (see page 89) to set the appearance of elements, categories of elements, specific instances of elements, and UDEs. One of the most useful applications of style sheets in SoftQuad H.i.P. is the ability to create custom views based on hidden styles. If you the want the reader of your document to be able to select different presentations of the information (i.e., show only certain parts of the document at at time) in the H.i.P. Viewer, you can define style sheets to hide certain classes of elements or UDEs while displaying others. The reader can then select the view that she wants in the H.i.P. Viewer. You can define styles from the H.i.P. Editor in the **H.i.P. Document Properties** dialog (see page 71)

■ Choose **Properties...** from the **File** menu or click on the ▨ toolbar button.

■ Click on the **Properties** tab of the dialog box. This will display a tree list of the various properties you can configure.

From here you can select Style Sheets from the tree list to add (attach) an existing style sheet or create a new style sheet; or you can remove or edit a style sheet that is already attached to the document.

Please see page 89 of the H.*i*.P. Information Manager reference for more information.

Custom meta data

Meta data is used to embed document meta-information that can't be defined by other HTML elements. Meta data is contained in the HEAD element within META tags. This kind of information is used by servers or browsers. SoftQuad H.*i*.P. uses meta data for many of the H.*i*.P. Monitor functions. The H.*i*.P. Monitor uses specific meta data (e.g., effective dates, topics) entered in the H.i.P. Document Properties dialog to keep track of pages that you have created and published on your intranet. Meta data is application/user specific. In SoftQuad H.*i*.P., the Monitor uses the meta data to keep track of your pages. Some browsers also use specific meta data (e.g., Netscape has an extension that allows a client-pull, where you set a page to load for a specified amount of time, then load another page).

While the meta information in the **General** and **Effective Dates** tabs of the **H.i.P. Document Properties** dialog is specific to the H.*i*.P. Monitor, you can also create *Custom METAs* for other browser or server applications that can use meta data. The **Properties** tab of the **H.i.P. Document Properties** dialog shows a tree-list of items that you can include with your document.

■ Select **Custom META** in the list. If there are custom metas already defined in the document, the entry will be expandable.

■ From here, you can add, edit, or remove a custom meta from your document.

Please see the H.*i*.P. Information Manager reference for information about editing the **Custom Metas** in the **H.i.P. Document Properties** dialog (page 71).

Annotations

Merging annotations

With SoftQuad H.*i*.P., users who view H.*i*.P. format documents in the H.*i*.P. Viewer can make annotations (see page 154) to the document that others can view. These annotations are saved as separate files (*.hpa*) in a location specified by the annotator. Using the H.*i*.P. Editor, you can include these annotations right in the document as you edit it, helping you to refer to other people's suggestions for revisions, etc. The command to do this is called **Merge Annotations...** in the **Edit** menu. When you choose this command, you will get a file chooser that helps you find annotation files associated with the document.

When the **Merge Annotations...** dialog first opens, it will display any annotation files specifically associated with the current document in the current folder.
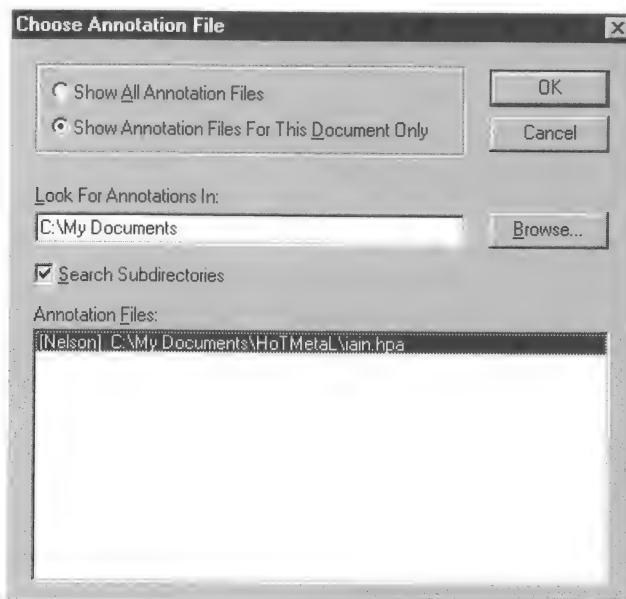
- Choose the annotation you want to include in your document from the **Annotation Files** list and click on [OK] .

If the **Annotation Files** list is empty, or if you want to merge an annotation other than the one(s) in the list, you can change any of the criteria for finding annotation (*.hpa*) files.

By default, the **Merge Annotations...** dialog only looks for annotations specifically associated with the document you have open in the H.*i*.P. Editor. To list *all* the annotation files in the current folder:

- Click on the **Show All Annotation Files** radio button.

The [OK] will change to a [Search]
- Click on the [Search] button.

If there are other annotation files in the current folder, they will appear in the ANNOTATION FILES list. If you want to search a different folder, you can enter the path to the folder in the **Look for Annotations In** box, or navigate to the folder using the [Browse] button. You can specify a folder and then search all of its subfolders by clicking on the **Search Subdirectories** checkbox.

When you have chosen the annotation file you want to merge into your document, click on [OK] . The annotations from the annotation fie will be inserted, including the user's name, inside the element that the annotation refers to. You can then view the comments and use them to make changes to your document.

If the annotation file was written for a document other than the one you have open in the H.*i*.P. Editor, or if you have changed the point to which the annotation refers in the document, you will get a warning message informing you of the difference, and asking if you want to continue to merge or to cancel.

Removing annotations

Once you have used the merged annotations to help you with document revision, you can remove them from the document by choosing **Remove Annotations...** from the **Edit** menu. This brings up a dialog box listing all of the merged annotation files.

- Choose the individual annotation files you want to remove or click on [Select All] to remove all of the annotations.
- Click on [Remove] .

The annotations will be removed from the document.

Core HTML

Because SoftQuad H.i.P. is based on HTML, it is important for you to understand the basics of creating an HTML document in order for you to be able to use SoftQuad H.i.P. This chapter covers the most common HTML markup for simple documents. If you are already familiar with HTML, you may want to skip ahead to the chapter *Working with files* (see page 241).

The authoritative sources of information on the structure of HTML documents are the IETF HTML 2.0 and IETF HTML 3.0 specifications. Choose **Technical Reference** from the **Help** menu page for the URL for this document.

The HTML rules used by the H.i.P. Editor also contain some elements and attributes from the HTML 3.2 specification, as well as some elements and attributes that are supported by the Microsoft Internet Explorer and Netscape Navigator browsers. The elements covered in the H.i.P. Extensions chapter are supported by the HTML 3.2 specification, and, unless otherwise specified, will work with the Netscape Navigator and Microsoft Internet Explorer with the H.i.P. Viewer installed.

This section provides a short summary of the HTML 2.0 elements and some of the supported extensions. The rules governing the HTML format are quite flexible, and furthermore the H.i.P. Editor will guide you through the document structure: therefore, the approach followed here will not be to enumerate all the possible combinations of elements. Rather, an overview of the structure will be presented, together with a discussion of the different groups of elements:

☐ Head and Body

☐ Headings

☐ Block elements

☐ Character formatting

☐ List elements

☐ Link elements

☐ Forms

☐ Code elements

☐ Backgrounds and fonts

☐ Alignment

Head and Body

An element called HTML surrounds the whole document. This element contains two sub-elements, HEAD and BODY. These elements are required.

The HEAD element is, by default, hidden in the H.i.P. Editor. To display the HEAD element, choose **Show Head Element** from the **View** menu. HEAD has sub-elements that define header material:

☐ TITLE: document title. This element is required. You can enter the document title in the **Properties** dialog in the **File** menu.

☐ BASE: can be used to record the document's location in the form of a URL. The URL recorded here may be used to resolve a 'relative URL' (necessary if the document is not accessed in its original location).

☐ ISINDEX: indicates to the browser that the document is an index document. This is used only if the document is on a server that does indexing.

☐ LINK: indicates a relationship between this document and some other object on your intranet or the Web. The H.i.P. Editor uses the LINK element to associate a document with such things as live table of contents files, style sheets, and User-Defined Extensions files.

☐ META: gives information that appears in HTTP headers. SoftQuad H.i.P. uses some META information, such as creation dates, revision dates, and document descriptions. These can be defined in the **Properties** dialog in the **File** menu.

SoftQuad H.i.P. uses the LINK and META elements to define many aspects of the H.i.P. document. These are most easily defined by choosing **Properties** from the **File** menu. Please see the section on H.i.P. extensions (page 187) for a detailed explanation.

To insert one of the 'head' elements:

■ Make sure that the HEAD element is visible by choosing **Show Head Element...** from the **View** menu.

■ Put the insertion point inside HEAD.

■ Click on the ▣▣ (head elements) toolbar button without releasing the mouse button.

■ From the pop-up menu that appears, select the element you want to insert and release the mouse button.

You can also choose the head element you want by choosing **Insert Element...** from the **Markup** menu, or by typing ⸤Ctrl+I⸥ at the keyboard.

The BODY element contains most of the information in the document. An exception to this is a document that uses *frames*: see page 218 for more information.

Headings (six different kinds)

Inside the BODY element, heading elements (H1 through H6) are generally used to start major divisions of the document (headings are not mandatory, however). Headings are permitted to appear in any order, but you will obtain the best results when your documents are displayed in a browser if you follow these guidelines:

☐ H1 should be used as the highest level of heading, H2 as the next highest, and so forth.

☐ You should not skip heading levels: e.g., an H3 should not appear after an H1, unless there is an H2 between them.

To insert an H1 or H2 heading:

■ Click on the **H1** or **H2** toolbar button.

To insert an H3 to H6 heading:

■ Click on the **Hn** toolbar button without releasing the mouse button.

■ From the pop-up menu that appears, select the heading you want to insert.

■ Release the mouse button.

> **Note** The content of headings is often displayed in live tables of contents in the H.i.P. Viewer.

Block formatting

The major divisions of a document body's structure comprise the following elements, in alphabetical order:

☐ ADDRESS: if you want to include the address of the author of the document, enter it inside this element. Insert this element by clicking on the ▣ toolbar button.

☐ BLOCKQUOTE: used for quotes from another source, requiring special block-style formatting. (▤ button.)

☐ DL, DIR, MENU, OL, UL: list elements (see *List elements*, on the next page).

☐ P: paragraphs. (¶ button.)

☐ PRE: pre-formatted text. Use this element when you want the browser to use the same line breaks and spacing that you entered. The text will be formatted by a browser using a fixed-width 'typewriter' font. (▤ button.)

Character formatting

The following elements are used primarily to add emphasis to inline text:

☐ B: bold. Insert this element by clicking on the ▣ toolbar button.

☐ CITE: represents a document citation. (▣ button.)

☐ EM: browsers *usually* represent this element in italic. (▣ button.)

☐ I: italic. (*I* button.)

☐ STRONG: browsers *usually* represent this element in bold. (▣ button.)

☐ TT: characters inside this element are formatted with a 'teletype' font (a fixed-width typewriter font, such as Courier). (▣ button.)

You can also insert any of these elements by choosing the corresponding command from the **Format** menu.

Line breaks

If you want to force a browser to break the current line in the text, insert a BR element (you can do this by clicking on the ▣ toolbar button). You can't type inside this element: it just causes a line break.

Horizontal lines

To cause the browser to display a horizontal line (rule) in your document, insert an HR element (you can do this by clicking on the ▣ toolbar button). This inserts a line in the H.i.P. Editor document window. Double-clicking on the line will allow you to set certain attributes (all of which are extensions to the HTML 2.0 standard, so use them with caution):

– SIZE: height of the rule in pixels.
– WIDTH: width of the rule in pixels or percentage of screen width.
– NOSHADE: whether the rule should have a 3D or flat look.
– SRC: a URL to an image that will be displayed in place of the rule in capable browsers (uncommon).
– ALIGN: see page 215.

List elements

HTML supplies five list elements. With the exception of DL, list elements are composed of one or more LI (list item) elements.

You can *nest* lists by inserting a UL, OL, etc., inside a list item (LI).

☐ OL: ordered list. Items in this list are numbered automatically by the browser. The numbering will reflect nesting levels. Insert an OL by clicking on the ▣ toolbar button.

☐ UL: unordered list. Items in this list start with a list mark such as a bullet. Browsers will usually change the list mark in nested unordered lists. (Click on the ▣ button.)

☐ DL: list of definitions. This is an unordered list. This kind of list is different from the others: each 'item' in a DL consists of one or more terms (DT elements), followed by definitions (DD elements). To insert a DL, click on the ▣ toolbar button; click on ▣ to insert a DT, ▣ to insert a DD.

☐ DIR: directory list. This is an unordered list. Each LI element in this kind of list should be no longer than 24 characters.

☐ Multiloc: a H.i.P. one-to-many link (multiple location link). This H.i.P. element is based on the MENU list (described below). The H.i.P. Viewer displays a Multiloc as a pop-up menu of hypertext links. (See page 191 for more about multilocs.)

☐ MENU: menu list. This is an unordered list. Each LI element in this kind of list should be no longer than one line.

Each list type also has a 'compact' version, which will be displayed with less whitespace in a browser.

To insert a menu list, directory list, and all compact lists:

■ Click on the ▦ ('Other lists') toolbar button without releasing the mouse button.

■ From the pop-up menu that appears, choose the list you want to insert.

■ Release the mouse button.

Anchors

It is normal for HTML documents to contain links to other documents, which can be located anywhere on the Web. These links are provided by URLs (*Uniform Resource Locators*), which give the location and filename of a document, and the method used to access it.

The A (anchor) element is the one most commonly used to represent links to other documents. The HREF attribute of this element represents a URL. If this attribute has a value, the content of the A element will be highlighted when the document is displayed in a browser window, and clicking on this content will cause the browser to attempt to open the file specified by the URL.

To insert an A element:

■ Click on the ▦ toolbar button, or choose Insert Anchor... from the Markup menu.

This inserts the A element and gives you a dialog box in which to create

the URL.

To edit the URL of an existing A element:

- Put the insertion point inside the A element.

- Click on the ▦ toolbar button, or choose **Edit URL...** from the **Markup** menu.

Links to a specific location

In general, you can set up a 'source' and 'target' anchor pair by setting the NAME attribute of the target anchor to '*string*' and setting the URL of the source anchor to '*#string*'. This sets up a one-way link. You can set up a two-way link by editing the two anchors so that each one's NAME attribute corresponds to the other's URL. See the section *Links to a specific location* (page 283) in the *Links* chapter for more information.

With H.i.P. you can link from one point in your document to many targets

For more information

See the *Links* chapter (page 275) and the section on H.i.P. *one-to-many links* (page 191).

Images

Graphic images are normally represented by an IMG element. The SRC attribute of the IMG represents a URL. It is good markup practice to make your pages accessible to visually impaired users by providing a brief description of the image in the ALT attribute. See the section on accessibility for more information (page 257).

To insert an IMG element:

- Click on the ▦ toolbar button

This inserts the IMG element and gives you a dialog box in which to create the URL.

You can also drag and drop image files into a the H.i.P. Editor document window.

To edit the URL of an existing IMG element:

- Put the insertion point inside the IMG element.

- Click on the 🖼 button, or choose **Image Attributes...** from the **Tools** menu.

'Hot images'

A 'hot image' is used like an anchor—when you click on the image, the browser performs an action.

This is very easy to accomplish: you just need to insert an IMG element inside an A element. Both elements must have a URL: the IMG's URL locates the image, and the A's URL locates the file that is retrieved when you click on the image.

> **Note** You will notice that the H.i.P. Viewer places a colored border around 'hot images' the same way it highlights link text. You can remove this highlighting from your image by setting the BORDER attribute value to '0' (zero).

Images with hot spots

Sometimes you will see images that have several 'hot spots' that you can click on to access URLs. There are two ways to accomplish this: *client-side* or *server-side* image maps. Because server-side image maps use the server to accomplish the image map setup, they are used by more browsers; however, client-side image maps are faster and less complicated to set up and are gaining in popularity. The H.i.P. Editor supports both.

Server-side image maps use an *image map file*, which tells the browser where the hot spots are. Client-side image maps use the MAP element within an HTML document to define an image map. See the sections *Image maps* and *Usemaps* (page 307) in the *Working with images* chapter for more information. There are several references to clickable image maps (ISMAPs) in the Technical Reference page, accessible by choosing **Technical Reference** from the **Help** menu.

For more information	See the *Working with images* chapter (page 303).

Forms

A number of 'form' elements are used to construct forms that the user can fill in and submit over your intranet. When your document is viewed, the browser will generate the appropriate graphical objects. The H.i.P. Editor also displays the form elements in graphical format (as a text field, check box, etc.).

There are three ways to insert form elements:

– Click on the corresponding button in the 'Forms' toolbar.

– Choose the corresponding command in the **Forms** menu.

– Insert the element using the **Insert Element…** command in the **Markup** menu.

You will probably find it more convenient to use either the toolbar or the **Forms** menu.

FORM element

The FORM element is the top-level element for a form. (It surrounds all of the other form elements). To insert this element, click on the 🖳 toolbar button or choose the **Form** command in the **Forms** menu.

The FORM element's ACTION attribute (which you can edit with **Edit URL…** in the **Markup** menu) specifies the form's *action*, that is, the program or e-mail address that the form is submitted to.

'Input' objects

There are several types of objects that are represented by the INPUT element. These are differentiated in an HTML document by the value of the TYPE attribute. When you create one of these objects using the toolbar or the **Forms** menu, the H.i.P. Editor sets the TYPE attribute to the appropriate value.

☐ A *text field* is a field in which the user can enter a line of text. To generate a text field, click on the 🔡 toolbar button or choose **Text Field** from the **Forms** menu. The value of the TYPE attribute for a text field is TEXT.

☐ A *password field* is similar to a text field. The only difference is that the text that the user types in the field is not displayed in the browser window. Click on the ⟦**⟧ button or choose **Password Field** from the **Forms** menu. The value of the TYPE attribute is PASSWORD.

☐ A *checkbox* can be turned on or off and is used to offer a yes/no choice. Click on the ⟦☑⟧ button or choose **Checkbox** from the **Forms** menu. The value of the TYPE attribute is CHECKBOX.

☐ A group of *radio buttons* is used to offer only one choice from a group. Click on the ⟦◉⟧ button or choose **Radio Button** from the **Forms** menu. The value of the TYPE attribute is RADIO.

☐ Forms normally contain a *submit button* that the user clicks on to submit the form's data over the Web. Click on the ⟦ok⟧ button or choose **Submit Button** from the **Forms** menu. The value of the TYPE attribute is SUBMIT.

☐ If a form contains a *reset button*, the user can click on it to reset the data in the form to their default values (usually blank). Click on the ⟦Rset⟧ button or choose **Reset Button** from the **Forms** menu. The value of the TYPE attribute is RESET.

☐ An *image button* is an image that functions as a submit button. Click on the ⟦▨⟧ button or choose **Image Button** from the **Forms** menu. The value of the TYPE attribute is IMAGE.

☐ A *hidden field* is not displayed in the browser; it is used to send information that is used only by the recipient of the form's data. Click on the ⟦▨⟧ button or choose **Hidden Field** from the **Forms** menu. The value of the TYPE attribute is HIDDEN. The H.i.P. Editor displays this object as a pair of tag icons.

The following two input types are not part of the HTML 2.0 specification. Use them with caution.

☐ A *file field* allows the user to attach a file to the data submitted with the form (also referred to as *file uploading*).
You can insert a file upload input element by clicking on the ⟦▣⟧ toolbar button or choosing **File Field** from the **Forms** menu.

You can specify a list of file types that are acceptable for uploading.

- Double-click on the file upload object.
- Enter the list of file types in the **Acceptable File Types** text box of the **Input File Chooser Field** dialog box.

You must also change the 'MIME type' of a form that will have one or more files uploaded with it:

- Using **Element Attributes...**, enter the value *multipart/form-data* for the **FORM** element's **ENCTYPE** attribute.

☐ A form can contain extra *buttons* that activate script commands. To create this kind of object:

- Insert any of the objects described above.
- Click on the object.
- Choose **Element Attributes...** from the **Markup** menu, or type F6 at the keyboard.
- Set the **TYPE** attribute to **BUTTON**.

The H.i.P. Editor displays this element as a pair of tag icons. A script can use the information contained in any of several attributes of an **INPUT** element: **onBlur, onClick, onChange, onLoad,** and **onSelect.** For more information, see the section *Scripts* (page 229) and any available external documentation on the scripting languages (e.g., JavaScript).

Selection list

A selection list represents a group of choices that a user can make. Browsers implement this kind of list as a drop-down list or a scrollable list. A selection list corresponds to a **SELECT** element that contains one or more **OPTION** elements; each **OPTION** corresponds to a choice in the list.

To create a selection list:

- Click on the ▦ button or choose **Selection list** from the **Forms** menu.
- To add the individual options, double-click on the selection list object and enter the options in the dialog box that appears.

For more information, see the tutorial on selection lists.

Multiline text areas

A text field lets the user enter a *single* line of text; if you want users to be able to enter *several* lines of text, you should create a *multi-line text area* in the form.

- Click on the ▣ button or choose Multiline text from the Forms menu.

A multi-line text area corresponds to a TEXTAREA element.

Form object properties

Objects in a form have a number of properties that you can (or, in some cases, must) edit. Some common properties are:

□ *Name*: most form objects must have a name. Except with radio buttons, a name cannot be used twice in the form. When the form is submitted, the name is sent along with the input data for that object, so that the receiving program will know which graphical object the data came from. The objects that require a name are: text field, password field, check box, radio button, hidden field, selection list, and multi-line text area.

Each member of a group of related *radio buttons* must have the *same* name, so that the browser will know that only one of them can be turned on at a time.

□ *Value*: the value associated with a form object is normally the data that the user enters. Some objects—text fields, password fields, options (from a selection list), multi-line text areas—let you specify a default value. Check boxes have a default value of 'off' or 'on', depending on whether the user checks them; this can also be overridden. Radio buttons *must* be given a value when the form is created.

□ *Dimensions*: you can specify the default dimensions of some objects. Widths are specified in characters; heights are specified in lines. Note that the *size* of a selection list determines whether it is displayed as a drop-down list or a scrollable list. If the size is 2 or greater, the browser displays a scrollable list.

□ *Checked*: you can specify that a check box or radio button is checked (turned on) by default.

Once you have inserted a form element, you can edit its properties in two ways:

1. Double-click on the element (that is, on the graphical object).
2. Click once on the object and then choose **Input Attributes...** from the **Forms** menu.

Either of these actions brings up a dialog box, specific to each type of object, that lets you edit the object's properties. Most of these properties correspond to the attributes of the element: if you wish to edit the attributes directly, click on the object and then choose **Element Attributes...** in the **Markup** menu.

Layout

You can use other elements such as paragraphs, tables, and horizontal lines to organize the layout of the graphical objects in a form.

For more information

For more information on form objects and their properties, see the tutorial on forms. You can also retrieve the document describing the Common Gateway Interface (CGI) for forms from the Technical Reference page, accessible by choosing **Technical Reference** from the **Help** menu.

'Code' elements

The elements in this section would normally be used in technical manuals or papers.

☐   **CODE**: code samples.
☐   **KBD**: used to display text that a user would enter at the keyboard. (Do not confuse this with **INPUT**, used in forms.)
☐   **SAMP**: literal characters.
☐   **VAR**: represents a variable name.

You can insert any of these elements using **Insert Element...** in the **Markup** menu.

Backgrounds and fonts

Many browsers let you choose the color for the document background and various kinds of text in the entire document, or choose an image to be displayed as the document background. As well, you can change the color and size of text in part of the document.

Document colors: background, links, and text

To change the background color of your Web page H.i.P. document, choose **Document Colors...** from the **Format** menu. This brings up a dialog box which lets you set the background color either directly, by typing in a color in hexadecimal red-green-blue format, e.g., '#ad65b7', or by bringing up the standard Windows color chooser, where you can choose a standard color or create one of your own. The background color of the document in the H.i.P. Editor will change to reflect your choice.

> **Note** In the hexadecimal red-green-blue format, a color is represented as six numbers in base sixteen (that is, the digits from 0 to 9 plus the letters 'a' to 'f' are used). The first two digits are interpreted as the amount of red, the second two as the amount of green, and the last two as the amount of blue.

You can also edit the attributes of the BODY element directly by right-clicking inside the BODY element and choosing **Element Attributes...** from the pop-up menu. Background color is controlled by the BGCOLOR attribute of the BODY element.

You can change the text and link colors in the same **Document Colors** dialog box. Text and link colors are set in the same way that the BGCOLOR is: either directly, by typing in a color in hexadecimal red-green-blue format, or by bringing up the standard Windows color chooser. The color of the text in the H.i.P. Editor will change to reflect this. The TEXT, LINK, ALINK, and VLINK attributes of BODY control the colors of text, links, active links (links currently being clicked on), and visited links (links that have already been clicked on), respectively.

> **Note** Some browsers (e.g., Microsoft Internet Explorer) let you use the standard set of Microsoft Windows color names instead of the hexadecimal codes. These are: black, maroon, green, olive, navy, purple, teal, gray, silver, red, lime, yellow, blue, fuchsia, aqua, and white. The hexadecimal color codes are more common and are accepted by more browsers.

Background images

To change the background image of your H.i.P. document, choose **Document Colors...**from the **Format** menu. This brings up a dialog box that lets you set the background image either directly, by typing in a filename or URL in the **Background Image** text box,or by bringing up the standard Windows file chooser dialog box. The H.i.P. Editor does not display the image in its background.

Embossed background images

Background images work best when they are low contrast. There should be no region on the image where dark text is lost in a dark patch of the background image, or light text is lost on a light patch. One of the best ways to do this is *embossing*. You can use the MetalWorks image editor that came with H.i.P. to create embossed backgrounds. To create a low contrast background use the emboss feature of MetalWorks on an existing image, then increase the image's brightness. For more information, see page 321.

Font color and size

You can change the font size and color for a piece of text by using toolbar buttons.

- Highlight the text that you wish to modify.

- If you click and hold on the ▒▒ toolbar button, you will get a pop-up menu in which you can set the *relative* (+/-) font size. Most browsers support font sizes between 1 and 7: 3 is the default size. When you choose a value from this pop-up, it is added or subtracted to the default. This causes the browser to increase or decrease the font size.

  Note The font sizes that you set with the FONT element are not equivalent to 'point sizes' used in typography, where, for example, a size of 10 to 12 would be to a normal text font size.

- From the font color toolbar button ▒ , you can set the COLOR attribute by using the Windows color chooser. You can also choose **Font Color...** from the **Format** menu.

Setting the size or color in this way inserts or surrounds the selected text with FONT tags. You can set the color and size manually for a piece of text by surrounding the text whose font size or color you want to change

with a FONT element, and then manually editing the SIZE and COLOR attributes by right-clicking inside the element and choosing Element Attributes... from the pop-up menu.

Setting the font for the whole document

Some browsers support the BASEFONT element, which lets you change the font for the entire document. If you use this element, you must insert it (using Insert Element...) directly to the right of the (BODY) start-tag.

To set a font size:

- Put the insertion point inside BASEFONT and choose Element Attributes... from the Markup menu (or type F6).
- Set the SIZE attribute to the desired size (between 1 and 7). The sizes are interpreted in the same way as for the FONT element.

If you set the font size with BASEFONT, the font size will not change in the H.i.P. Editor window, but it will change when the document is displayed in a browser.

If you specify the default font size with BASEFONT, but surround a piece of text with a FONT element that specifies a different size, the size specified in the FONT element will override the default (for the surrounded text only).

Alignment

To left-align, center, or right-align headers, paragraphs, horizontal rules and images:

- Place the insertion point inside the element whose alignment you want to change.
- Choose one of the alignment toolbar buttons: left ▤ , center ▤ , or right ▤ or choose Align Left, Align Centered, or Align Right from the Format menu.

To set the alignment 'manually', edit the ALIGN attribute of each of these element by choosing Element Attributes... from the Markup menu.

Extensions to HTML

HTML usage is constantly changing: new features are invented, and new versions of browsers extend their support for existing features. In this document we have tried to represent current and proposed usage as of the time of this writing. All of these extensions are available to the H.i.P. Viewer plug-in, and can be used in H.i.P. documents, but they are not SoftQuad H.i.P. specific. SoftQuad H.i.P. extensions to HTML are detailed on page 187. Any identification of features of a specific product is included for the information of users, and should not be interpreted as an endorsement by SoftQuad Inc.

This chapter outlines some of the most important extensions to HTML that are supported by the H.i.P. Editor. The following types of extensions are discussed:

☐ Frames

☐ Java support

☐ Script support

☐ Objects

☐ Scrolling 'marquees'

☐ Text formatting

☐ Block formatting

☐ Attribute extensions

☐ Miscellaneous

Frames

Frames allow you to divide the browser window into multiple regions, each displaying a different document. SoftQuad H.*i*.P. uses frames in its document format, so understanding frames will be helpful for understanding what happens when you edit, view, and convert to and from H.*i*.P. documents.

Frame sets

A document that contains frames has a **FRAMESET** (frame set) element as the top-level document content element instead of the **BODY** element. A frame set divides the browser window into rectangular regions. Each such region can be:

□ A *frame*, which displays one document. A frame is represented by a **FRAME** element.

□ A frame set, which will itself be divided into frames.

For example, a frame set can contain a frame, plus another frame set containing two frames, resulting in three frames in all.

A frame document can also contain a **NOFRAMES** element, which contains a **BODY** element. If a frame document is viewed by a browser that does not support frames, the contents of the **NOFRAMES** element will be displayed by that browser.

> **Note** We have also included the element 'NOFRAME' (note the different spelling) because some sources appear to use this spelling of the element name. 'NOFRAMES' seems to be the preferred form.

You can create and edit a frame document in the H.*i*.P. Editor either manually, by inserting frame markup and editing frame set and frame attributes , or by using the frame editor.

It may be easier to work with frameset documents in the H.*i*.P. Editor if you have loaded a styles file—such as *showall.asf*—that makes some of the attributes of frames visible. See page 344 for more information on styles files.

Frame editor

The H.i.P. Editor has a frame editor that will let you create and edit frame documents in a graphical way.

- If the document doesn't contain any frames, choose **Convert to Frames** from the **Tools** menu.

This inserts a FRAMESET element and surrounds the BODY element with a NOFRAMES element.

Once your document has a FRAMESET element, you're ready to start editing the frame document.

- Open the frame editor by choosing **Frame Editor...** from the **Tools** menu.

This command will be grayed out if the current document does not have a FRAMESET element; i.e., if the document has not been converted to a frame document.

The frame editor has two parts: a *controls* area and a *graphical* area. The controls area lets you create frames and set options for each frame. The graphical area also lets you create frames, and is a representation of the placement and relative sizes of the frames in your frame document.

The currently selected frame is outlined in yellow. To undo any frame editor action, click on the ▧ button in the controls area. To redo a frame editor action, click on the ▧ button.

The currently selected frame is outlined. To undo any frame editor action, choose the **Undo** command in the **Edit** menu. To redo a frame editor action, choose the **Redo** command.

Rows and columns in the same frame set

If your document contains a FRAMESET that has values for both the ROWS and COLS attributes, you cannot not edit it with the H.i.P. Editor's frame editor. In this case, you can manually convert it to an equivalent form using nested FRAMESETs and either ROWS or COLS but not both. Use the following procedure:

- Using **Element Attributes...**, delete the COLS attribute value of the FRAMESET.

- Within the FRAMESET, use **Insert Element...** to surround the FRAME/FRAMESET elements corresponding to each row with a FRAMESET element. For example, if the original FRAMESET contains 6 FRAMEs, and you want to have 3 rows, surround the first two FRAMEs with a FRAMESET, then the next two, and then the final two.

- Using **Element Attributes...**, give each of the new FRAMESETs the same COLS attribute value that the original FRAMESET had.

Creating frames

You can create frame areas in several different ways. Clicking on the ▨ button will split the currently selected frame horizontally into two equal frames, and clicking on the ▥ button will split the selected frame vertically. If you right-click on the graphical area of the frame editor, a pop-up menu will appear, in which you can choose **Split Horizontal** or **Split Vertical**. Each frame, when split, will take up exactly half of the previous frame's area. To create custom-width frame areas:

- Move your cursor to the edge of any graphical area in the frame editor.

- Hold down the left mouse key. The cursor changes to a double-headed arrow.

■ Drag away from the edge. This will 'pull' the edge of the frame with the mouse, creating two different frame areas.

Note that you have to take care which frame edge you are dragging; several frame edges can be 'piled up' at the edge of a frame area. The size of the selected frame expressed as a percentage of the document width or height, is shown in the **Size** text boxin the controls area.

Sizing frames

There are three ways to specify the height or width of a frame.

- As a percentage of the frame set's height or width. (This is default way that the frame editor specifies the size.)
- As an absolute (specific) number of screen pixels (e.g., 100).
- As a 'relative size'.

When you create a frame or manipulate its size in the frame editor, these values (as a percentage) will be generated automatically. You can also enter a value of your choice for the current frame in the **Size** text box in the controls area, and then click on the check box (or type (Return)) to set the value. The **Size** value will correspond to the frame height (i.e., it will be a **ROWS** value) or the frame width (i.e., it will be a **COLS** value), depending on which direction the current frame set was split (remember that the frame editor can't split the same frame set into both rows and columns).

Absolute pixel sizes are not always a good idea, since the browser window size can vary on different platforms. A 'relative size' is specified with an asterisk, e.g., '1*', '2*', '3*' ('1*' can also be written simply as '*'). This is interpreted as follows: after all widths (or heights) specified as percentages or absolute amounts have been allocated to the corresponding frames, the remaining space will be allocated to frames whose widths (or heights) have been specified as a relative size. The amount of space allocated to a frame is proportional to the number in front of the asterisk. For example, suppose you had four horizontal frames with the following sizes within one frame set:

    50%,100,*,2*

Suppose the browser window is currently 800 pixels high. The first frame will get 50% of the total height, that is, 400 pixels; the second frame will get 100 pixels, since an absolute amount was specified. This leaves 300 pixels to be divided between the other two frames. The fourth frame's

height is specified as '2*', so it will be twice as high as the third frame, whose height is only '*' (1*). Therefore the third frame will be 100 pixels high and the fourth will be 200 pixels high.

Deleting frames

To delete a frame, select it by clicking in it and then click on the delete **DEL** button in the controls area. You can also use the (Delete) key on your keyboard, or right-click inside the frame that you want to delete and choose **Delete** from the pop-up menu that appears.

Specifying the frame's default document

The SRC attribute of a FRAME element specifies the default document displayed in the frame. To set the SRC attribute of the frame in the frame editor:

- Click in a frame.
- Enter the document's URL in the **Source** text box. You can type it in directly, or use the file browser to choose a local file by clicking on the (Browse) button.

Alternatively, you can drag and drop a file onto a frame area. The SRC attribute of the frame will be set to the URL of the file that you dropped. If the document being edited has been saved, the URL of the dropped file will contain a full folder path. If the document has never been saved, the URL will contain a relative path.

If you do not specify a default document for a frame, it may be displayed blank in the Web browser, or not displayed at all.

Other frame properties

All of these properties are optional.

- ☐ *Name*: To name a frame, click on a frame to select it, and enter the frame name in the **Name** text box.Names are important for targeting specific frames (see page 224). The frame name corresponds to the NAME attribute.

- ☐ *Margins*: The top and bottom, and left and right margins of each frame can be set by entering values (in pixels) in the **Margin** text box-esprovided in the controls area of the frame editor. The frame attributes are MARGINWIDTH (left and right margin width) and MARGINHEIGHT(top and bottom margin height).

☐ *Scrolling*: Frames can have scrollbars, no scrollbars, or you can let the browser decide; i.e., the frame will have scrollbars only if the document is larger than the current size of the frame. Click on the appropriate button in the scrolling options area of the form dialog: ▦(scrollbars), ◪ (no scrollbars), or ▦ (auto). This feature corresponds to the SCROLLING attribute; the possible values of this attribute are YES, NO, and AUTO. The default is AUTO.

☐ *Resizable*: You can specify a frame as resizable by clicking on the **Resizable** check box. This sets the NORESIZE attribute of the frame.

Recent changes to browsers allow for even more flexibility with frames and framesets. To use any of the following attributes, click inside the FRAME or FRAMESET element and choose **Element Attributes...** from the Markup menu:

Frameset attributes

☐ FRAMEBORDER: sets the presence of borders in all the frames or framesets within the current FRAMESET element. Netscape Navigator requires a value of 'yes' or 'no' and Internet Explorer requires a value of '0' for no borders and '1' for borders.

☐ FRAMESPACING: inserts additional space between frames. Enter the value in pixels.

☐ BORDER: sets the thickness of the borders within the current FRAMESET element. Enter the value in pixels.

☐ BORDERCOLOR: sets the color for the frame borders. Enter the hexadecimal red-green-blue value.

> **Note** BORDER and BORDERCOLOR are currently only used by Netscape Navigator.

Frame attributes

☐ FRAMEBORDER: sets the presence of borders in all the frames or framesets within the current FRAME element. Netscape Navigator requires a value of 'yes' or 'no' and Internet Explorer requires a value of '0' for no borders and '1' for borders.

☐ ALIGN: aligns the frame using values 'TOP', 'MIDDLE', 'BOTTOM', 'LEFT', and 'RIGHT'. 'LEFT' is the default value.

> **Note** This attribute is currently only used by Internet Explorer.

□ **BORDER**: sets the thickness of the border. Enter the value in pixels.

□ **BORDERCOLOR**: sets the color for the frame border. Enter the hexa-decimal red-green-blue value.

> **Note** BORDER and BORDERCOLOR are currently only used by Netscape Navigator.

Targeting specific frames

You can specify that a document referred to by an anchor should be displayed in a specific frame. To make this possible, the frame itself must be given a name, as described on page 222.

There are two ways to specify which frame a document will be displayed in:

□ The anchor (A, etc.) that points to the document can specify the frame: you must give the anchor's **TARGET** attribute the name of the desired frame.

□ You can specify the frame in the document itself, using the **TARGET** attribute of the **BASE** element.

If both methods are used, the frame name specified in the anchor takes precedence.

When you click on a link to the document, it will be opened in the specified frame if that frame exists; otherwise, a new window will be created.

Here is an example (in HTML format) of targeting specific frames using an anchor element. First, the document containing the frames:

```
<FRAMESET ROWS="33%,33%,33%">
    <FRAME NAME="upper" SRC="blueback.htm">
    <FRAME NAME="middle" SRC="sources.htm">
    <FRAME NAME="lower" SRC="blueback.htm">
</FRAMESET>
```

To create this document:

■ Create a new document.

■ Create the three frames.

■ Click in each frame and enter the appropriate name: upper, middle, or lower in the frame editor's **Name** field.

■ For the middle frame, enter sources.htm in the **Source** field.

- For the top and middle frames, enter `blueback.htm` in the **Source** field.

Here is a fragment from the document *sources.htm*, referred to in the middle frame above.

```
<P><A TARGET="upper" HREF="http://www.sq.com/">
SoftQuad Home Page
</A>
<BR>
<A TARGET="lower" HREF="http://www.w3.org/">
W3 Consortium Home Page
</A>
</P>
```

To create this document:

- Create a new document.

- Insert an anchor (A element) using the ▣ toolbar button.

- Give this anchor the URL *http://www.sq.com/*

- Insert the second anchor and give it the URL *http://www.w3.org/*.

- Enter the appropriate text inside each A element.

- Put the insertion point inside the first A element and choose **Element Attributes...** (or type F6 at the keyboard).

- Give the **TARGET** attribute the value upper (i.e., the name of the first frame).

- Similarly, give the **TARGET** attribute of the other A element the value lower (i.e., the name of the third frame).

Since each frame should have a default document, we suggest that you create a file called *blueback.htm* that has no content, but has the document background color set to blue.

When you load the frame document in a browser, three frames will be displayed. The middle frame will contain the document *sources.htm*, and the other two frames will be blank. If you click on the first anchor in *sources.htm*, the the document *http://www.sq.com/* will be displayed in the upper frame; clicking on the second anchor will cause the document *http://www.w3.org/* to be displayed in the lower frame.

Note At the time of this writing, browsers are unable to target a specific frame unless that frame has a 'default' document.

Special target names

The following strings have special meanings when used as target values in anchors (note that all of these start with an underscore character):

☐ **_self**: the document will be opened in the same frame that you clicked in.

☐ **_top**: the document will be opened in the full browser window (if the window has been divided up into frames, it will become a single pane again).

☐ **_blank**: the document will be opened in a new window

☐ **_parent**: the 'parent' frame set of the current frame will become a single frame, and the document will be displayed there.

For further information

See the *Technical Reference* page (choose **Technical Reference** from the **Help** menu).

Java support

Java is a programming environment that operates in conjunction with certain browsers to allow you to insert programs, called *applets*, in an HTML document.

Wherever an applet occurs in a document, it reserves an area on the browser screen in which it does some special processing, such as drawing a picture or interacting with the user.

The H.i.P. Editor supports the **APPLET** element for inserting applets. This element is used by the current release of Java. The **APP** element, used by the 'alpha' version of Java, is not supported by the H.i.P. Editor.

Applet insertion

You can insert applets into the H.i.P. Editor in three ways:

- Click on the [image] toolbar button. This will bring up a file chooser dialog box that prompts you to choose the applet *.class* file that you want to insert. After you choose the file, a dialog box in which you can set various attributes of the applet will appear (see below).

- Drag and drop an applet *.class* file into the H.i.P. Editor document window. An **APPLET** element with certain attributes set will be inserted into the document, and a dialog box in which you can set various attributes of the applet will appear (see below).

- Insert an **APPLET** element using **Insert Element...**, and edit its attributes manually by placing your insertion point inside the element, right-clicking, and choosing **Element Attributes...** from the pop-up menu.

Specifying the applet

The attributes of the **APPLET** element specify the applet file and the area on the screen in which it operates. The following attributes are set automatically if you drag and drop an applet into the H.i.P. Editor or use the [image] toolbar button to choose an applet file. They can be set manually by editing the attributes of the **APPLET**.

☐ **ID** – the identifier for the applet.

☐ **CODEBASE** – specifies the folder in which the applet file is located. If this attribute is blank, the applet is assumed to be in the same folder as the current document. The value of this attribute is generally a relative URL pointing to a local folder.

☐ **CODE** – the name of the file containing the applet. This attribute must specify a *filename* only (no folders). This information is required. Applets must be specified as *[name].class*, which means that local applets cannot be called on Windows 3.1 systems.

When you drag and drop an applet into the H.i.P. Editor or use the [image] toolbar button, the **Applet Attributes** dialog box appears. You can bring up this dialog box at any time by placing your cursor inside the **APPLET** element and choosing **Applet Parameters...** from the **Markup** menu. You can set the following attributes:

☐ ALT – some text that will be displayed if the document is displayed in a non-Java environment. The H.i.P. Editor inserts a default message for you, which you can modify.

☐ NAME – a name that other applets in the same document can use to refer to this applet.

☐ WIDTH – the amount of horizontal space (in pixels) reserved for the applet. This information is required.

☐ HEIGHT – the amount of vertical space (in pixels) reserved for the applet. This information is required.

☐ ALIGN – This lets you align the portion of the screen that has been reserved for the applet. You can align applets using the alignment toolbar buttons (see page 215).

☐ VSPACE – the amount of vertical space (in pixels) reserved for the area above and below the applet.

☐ HSPACE – the amount of horizontal space (in pixels) reserved for the area above and below the applet.

Applet subelements: PARAM

If the applet code requires some input data, this can be provided in the document itself, by way of PARAM elements. If these exist, they must be the first subelements of the APPLET element. A PARAM element doesn't have any content; the information it supplies is contained in its attributes:

☐ NAME – the name of an 'applet-specific attribute'. This must be a name that is known to the applet code.

☐ VALUE – the value associated with NAME.

There are two other attributes of PARAM: VALUETYPE and TYPE, which are used for PARAM within OBJECT. They are not used for PARAM within APPLET.

Applets in a non-Java environment

An APPLET can contain 'block' elements such as paragraphs, lists, and blockquotes. If present, these must appear after any PARAM elements. The content of these elements will be displayed only in a non-Java environment (either because the browser isn't Java-aware, or because Java display has been turned off).

For more information

Coding applets is beyond the scope of this manual; see the 'Technical Reference' page (choose Technical Reference from the Help menu) for references to Java.

Scripts

SCRIPT elements contain code, written in one of several programming languages, that is executed by a script-aware browser. JavaScript and Visual Basic Script are two such programming languages. The SCRIPT element lets you put code directly in an HTML document. JavaScript is supported by version 2.0 or higher of Netscape Navigator, and by Microsoft Internet Explorer. Visual Basic Script is supported by Microsoft Internet Explorer version 3.0 or greater.

The H.i.P. file format uses JavaScript to invoke the H.i.P. Viewer in your browser. See the *File Formats* appendix (page 414) for more details.

The actual code is usually placed between the start- and end-tags of a SCRIPT element. You can insert a SCRIPT element by using the Insert Element... command in the Markup menu. You can edit the SCRIPT element's attributes using the Element Attributes... command in the Markup menu.

The SCRIPT element has the following optional attributes:

☐ LANGUAGE: the language that the script is written in.

☐ SRC: the URL of a separate file that contains the script code. You can specify a script this way instead of putting the code directly into the SCRIPT element. If both an URL to a separate file and an internal script are defined, the script specified in the URL takes precedence.

The following attributes of SCRIPT are less common and are subject to change.

☐ TYPE: the script language's MIME type.

☐ SCRIPTENGINE: URL of a particular script engine; for example, a Perl interpreter.

☐ EVENT: used by some languages for passing parameters to the script.

☐ FOR: URL that specifies a particular element by means of an ID value. For example:

```
http://triptych.sq.com/orwell.htm#ID:catalunya
```

Often, the script element is surrounded by a comment or contains a comment so that the script contents can be hidden from browsers that do not understand the SCRIPT element. If you type the following sequence at the beginning of a script element before the code, the script will be ignored by most non-script capable browsers. Type:

```
<!--
```

just after the SCRIPT> start tag, and:

```
-->
```

just before the </SCRIPT] end-tag.

You can also use a new element called NOSCRIPT. Similar to the NOFRAMES element, the content of the NOSCRIPT element will be processed only if the user's browser doesn't support client-side scripting, or doesn't support the scripting language used in a preceding SCRIPT element in the document. The NOSCRIPT element can be placed around block elements anywhere inside the BODY element.

In addition to the script code, scripts can make use of attributes of other elements. These attributes define user input to a script. There is one form element that has been created especially for scripts: an INPUT element of type 'button' allows users to send data to a script (as distinct from a 'submit' or 'reset' button). The attributes will not be described here, but the following list notes them:

☐ onBlur: attribute of INPUT, SELECT, TEXTAREA.

☐ onClick: attribute of INPUT, A.

☐ onChange: attribute of INPUT , SELECT, TEXTAREA.

☐ onFocus: attribute of INPUT, SELECT, TEXTAREA.

☐ onLoad: attribute of BODY or FRAMESET.

☐ onMouseOver: attribute of A.

☐ onSelect: attribute of INPUT, TEXTAREA.

- □ onSubmit: attribute of **FORM**.

- □ onUnload: attribute of **BODY** or **FRAMESET**.

For more information

The details of how to code in JavaScript or Visual Basic Script are beyond the scope of this manual; see the 'Technical Reference' page (choose **Technical Reference** from the **Help** menu) for more information.

ActiveX and other objects

The **OBJECT** element lets you insert a program—called an 'Internet Control' (formerly called 'OLE Control')—into an HTML document.

> **Note** ActiveX is a Microsoft standard and is subject to change. You must obtain the ActiveX package from Microsoft and install it on your PC before any Internet Controls will be available. For more information, see http://www.microsoft.com/icp/, Microsoft's Internet Controls page.

In the future, some browsers may also use **OBJECT** as a replacement for all elements that create 'inlines' in Web browsers: **IMG, EMBED, APPLET,** etc.
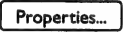
The H.i.P. Editor supports the use of objects and provides an easy way to insert Internet Controls. Internet Controls can be sent over the net, or, if a copy already exists on your PC, run directly from a Web browser. You can insert an ActiveX Internet Control object in three ways:

- Click on the ![toolbar button] toolbar button. This will bring up a dialog box that gives you a list of the Internet Controls installed on your system and prompts you to choose the one that you want to insert. *If there is nothing in this dialog box, then there are no Internet Controls registered on your system. You must obtain and install the ActiveX package. Choose* **Technical Reference** *from the* **Help** *to find out more.* After you choose the control, the **ActiveX Control Attributes** dialog box will appear where you can set various attributes of the control.

- Drag and drop an Internet Control (*.ocx*) file into the the H.i.P. Editor document window. (These files generally reside in the *windows\systems* folder.) An **OBJECT** element with certain attributes

set will be inserted into the document, and the **ActiveX Control Attributes** dialog box in which you can set other attributes of the object will appear.

■ Insert an **OBJECT** element using **Insert Element...**, and edit its attributes manually by placing your insertion point inside the element, right-clicking, and choosing **Object Parameters...** from the pop-up menu.

The ActiveX control will appear as a graphical object in the H.i.P. Editor. You can change this to display the object as markup by choosing **Show as Object Markup** from the **Markup** menu, or right-clicking inside the **OBJECT** element and choosing **Show Object Markup** from the pop-up menu. The command then toggles to **Show ActiveX Control**

The dialog box for setting the attributes of the Internet Control is very similar to the one used to set the attributes of the **APPLET** element: it contains settings for such display parameters as **WIDTH**, **HEIGHT**, **ALIGNMENT**, **VSPACE** and **HSPACE**. There is also a [Properties...] button which will take you to an Internet Control-specific dialog box to set parameters for that particular Internet Control. You can bring up this dialog again at any time by placing your cursor inside the **OBJECT** element and choosing **Object Parameters...** from the **Markup** menu, or by right-clicking inside the **OBJECT** element and choosing **Object Parameters...** from the context-sensitive pop-up menu.

The following attributes of **OBJECT** are used for ActiveX (and other objects):

☐ ID: the identifier of the control.

☐ CLASSID: the unique ID of the code. For an Internet Control, it's a string in base 64.

☐ DATA: the URL pointing to the code.

☐ CODETYPE: the MIME (Internet Media) type of the code (here, *application/x-oleobject*).

There are several other attributes that are used with different types of **OBJECT**. Here is a brief description:

☐ BORDER: the border of the object in pixels. It functions the same as **IMG**'s **BORDER** attribute. (See page 315.)

☐ ISMAP: tells the Web browser that the object is a imagemap. It functions the same as IMG's BORDER attribute.

☐ USEMAP: sets the location of a MAP definition. It functions the same as IMG's USEMAP attribute. (See page 314.)

☐ NAME: an identifier used with form submissions.

☐ DECLARE: declare but don't instantiate the object code.

☐ CODEBASE: specifies the folder where the code is located.

☐ TYPE: another way of specifying the MIME (Internet Media) type if the type of the DATA is distinct from the CLASSID type.

☐ STANDBY: a string that can be displayed in the Web browser while the OBJECT is loading.

☐ SHAPES: the object has shaped hypertext links.

You can also insert an OBJECT element and modify its attributes manually by placing your cursor inside the element, right-clicking, and choosing Element Attributes... from the pop-up menu. This is probably only useful when you are inserting a non-Internet Control OBJECT.

For more information

See the 'Technical Reference' page (choose Technical Reference from the Help menu).

Scrolling 'marquees'

A scrolling marquee is a piece of text that scrolls across a rectangular area that you define in the browser window. You specify the height and width of the marquee area, and then (if desired) specify margins. The scrolling text will be visible between the margins. Surrounding text can be aligned with the marquee area as you wish. This feature was introduced by Microsoft for Internet Explorer 2.0.

> **Note** Marquees are not currently supported by Netscape Navigator. If your H.i.P. Viewer is installed with Netscape Navigator, Marquees will not be visible.

To create a marquee:

■ Insert a MARQUEE element (using Insert Element...).

■ Between the tag icons, enter the text that you want scrolled.

The attributes of MARQUEE tell the browser exactly how the text will be displayed and scrolled. You can edit these attributes with the **Element Attributes...** command in the **Markup** menu.

☐ ALIGNMENT – how the surrounding text is aligned with the marquee text (TOP, MIDDLE, or BOTTOM).

☐ BEHAVIOR – specifies the type of movement of the text. The choices are:

– SCROLL – continuous scrolling on and off the screen (the default)

– SLIDE – the text scrolls until one end reaches the margin

– ALTERNATE – the text 'bounces' back and forth between the margins

☐ BGCOLOR – background color of the marquee area.

☐ DIRECTION – direction (LEFT or RIGHT) that the text scrolls. LEFT is the default.

☐ HEIGHT – height of the marquee area, in pixels (n), or as a percentage of the window height ($n\%$).

☐ HSPACE – width of the left and right margins, in pixels.

☐ LOOP – the number of times the text will scroll. If this attribute has the value '-1' or INFINITE, the text will scroll 'infinitely'.

☐ SCROLLAMOUNT – the number of pixels between successive scrolls of the text.

☐ SCROLLDELAY – the time in thousandths of a second between successive scrolls of the text.

☐ VSPACE – the height of the top and bottom margins, in pixels.

☐ WIDTH – width of the marquee area, in pixels (n), or as a percentage of the window width ($n\%$).

For more information

See the 'Technical Reference' page (choose **Technical Reference** from the Help menu) for references to marquees.

Text formatting

The following text formatting elements are available from the markup commands (**Insert Element...** and **Change Element...**).

> **Note** While these elements are supported by the H.i.P. Viewer, they are not supported by all browsers. If you are not creating H.i.P.-specific documents, use them with caution, and make sure that your pages look acceptable without these elements.

☐ Blinking text: surround text with the **BLINK** element to cause it to blink on and off in the browser.

☐ Preventing line breaks: surrounding text with the **NOBR** element prevents the browser from inserting line breaks. This element should be used only with short pieces of text (i.e., a few words).

☐ Word breaks: if there is a position inside a **NOBR** element where a line break *is* acceptable, you can put a **WBR** element at that position to tell the browser that it can break the line there, if necessary.

☐ Large and small print: surrounding text with the **BIG** or **SMALL** element causes the text to be displayed in large or small print, respectively, compared with the surrounding text.

☐ Strike-through text: surrounding text with the **S** element causes it to be printed with a line struck through the text.

☐ Subscripts and superscripts: surrounding text with the **SUB** or **SUP** element causes the text to be displayed as a subscript or superscript, respectively.

☐ Underlined text: surrounding text with the **U** element causes it to be underlined.

☐ Base font: the **BASEFONT** element lets you increase or decrease the default font size. The possible values of the **SIZE** attribute range between 1 and 7. These values are not specific font sizes, but rather are (somewhat) proportional to the actual font sizes. The default

value, 3, corresponds to the 'normal' font size. If used, this element must appear inside the BODY element before any 'block' elements. See also page 215.

☐ You can use the FONT element's FACE attribute to choose the font for a piece of text:

- Highlight the text you want to modify.

- Using Insert Element..., surround the text with a FONT element.

- Using Element Attributes..., set the FONT element's FACE attribute to the name of a font, e.g., 'Arial', 'Courier'.

This feature is not supported by all browsers, but should be available to browsers with the H.i.P. Viewer installed.

> **Note** Many font names are platform-specific—a font that is understood by a Macintosh browser may not be understood by a Windows browser, and vice versa.

☐ The FONT element can also be used to change font size or color. See page 214.

Block formatting

The elements in this section can be created using Insert Element... or Change Element...; the attributes can be edited using Element Attributes.... All of these commands are in the Markup menu.

☐ Divisions: you can create 'divisions' by surrounding sections of your document with a DIV element. This element can surround 'block' elements. A DIV can be aligned left, right, or center using its ALIGN attribute.

☐ Centered text: surround text with the CENTER element to cause it to be centered in the browser. Some elements also have an ALIGN attribute that can be set to the value 'CENTER'. This will work in some browsers that don't support the CENTER element.

☐ List marks: the TYPE attribute lets you choose the list mark for an entire unordered list (UL) or a specific list item (LI). The possible values are DISC, CIRCLE, and SQUARE.

☐ Numbered lists: the TYPE attribute lets you choose the numbering style for an entire ordered list (OL) or a specific list item (LI). The possible values are '1', 'I', 'i', 'A', and 'a', representing arabic, upper- and lower-case Roman, and upper- and lower-case alphabetic numbering, respectively. The START attribute of OL lets you start the numbering for that list at a value other than '1'; similarly, the VALUE attribute of LI lets you restart the numbering for the current and subsequent list items at a value other than '1'.

☐ Body margins: Internet Explorer supports the LEFTMARGIN and TOPMARGIN attributes of the BODY element. These let you specify the size of the left and top margins, respectively, in pixels.

Attribute extensions

Many elements have the attributes listed below. These attributes are extensions to the HTML 2.0 specification that are to be used with such HTML features as cascading style sheets (see page 194). Most of these attributes are available in the H.i.P. Viewer. The following is a brief definition of these attributes: for a full explanation, read the HTML 3.0 specification. Choose Technical Reference from the Help menu for the URL for this document.

☐ ID: a unique identifier for a particular element.

☐ CLASS: a name used to define the type of a particular element. This attribute is used by SoftQuad H.i.P. to create UDEs.

☐ LANG: used to determine the language of the element; e.g., 'en.uk' is used for British English.

☐ DIR: defines the direction of text; right-to-left or left-to-right. Used with the LANG attribute.

☐ STYLE: used for style sheets.

The H.i.P. Editor makes special use of the ID and the CLASS attributes in creating User Defined Extensions (UDEs) and for implementing Cascading Style Sheets. Please see the reference on creating UDEs (page 79) and Cascading Style Sheets/Custom Views (see page 89) for more information.

Miscellaneous

□ The META element: you can edit its attributes using **Element Attributes...**. The META element has special uses in H.*i*.P. You can insert META information for the H.*i*.P. Monitor such as document information (e.g., publish and expiry dates) using the **H.i.P. Document Properties** dialog—click on the ![icon] toolbar button or choose **Properties...** from the **File** menu (see page 194). The **Document Properties** dialog also lets you enter **Custom Metas** such as a client-pull (see page 195). You can also insert a non-H.*i*.P. specific META element by clicking and holding the ![icon] toolbar button and choosing META from the pop-up menu, or by placing the insertion point inside the HEAD element and choosing **Insert Element...** from the **Markup** menu.

□ Bulletins: this is a technique for making a document particularly visible to certain monitoring software (e.g., SmartMarks, Smart Hotlist, Smart Bookmarks). Bulletin information can be added to a link: the H.*i*.P. Editor supports the **BULLETIN-TEXT**, **BULLETIN-DATE** and **BULLETIN-IMAGE** attributes of the A element for this purpose. This information can also be added at the page level using the META element. See the Technical Reference for more information.

□ DFN: surrounding a term with this element indicates that this is the defining instance of the term.

□ Embedded elements: Netscape Navigator 3.0 lets you use the **EMBED** element to insert a graphical 'object' in an arbitrary format into the document. These objects will be processed by 'plug-in' applications. You can think of **EMBED** as a generalization of the **IMG** element. The attributes of **EMBED** are:

  □ **NAME** – the target name of the object.

  □ **SRC** – the URL of the file to be embedded.

  □ **HEIGHT** – the height of the displayed image.

  □ **WIDTH** – the width of the displayed image.

  □ **UNITS** – determines what units to use for the **HEIGHT** and **WIDTH** attributes, pixels or en dashes.

- ☐ **ALIGN** – sets the alignment of the text around the object controls in the same way as the **ALIGN** attribute works with the **IMG** element.

- ☐ **PLUGINSPAGE** – lets you specify a URL from which the user can download the necessary plug-in.

Netscape Navigator also lets you insert variable or application-specific attributes. Only some of these are supported by the H.i.P. Editor. If you want to insert such attributes that are not available from the **Element Attributes...** of the **EMBED** element, you should open the HTML file with a text editor and insert the attributes manually, inside the **EMBED** start-tag. A file that contains these attributes cannot be opened with the H.i.P. Editor.

☐ Sound: Internet Explorer supports the **BGSOUND** element, which specifies the sound that is played when the document is accessed. The **SRC** attribute specifies the URL of the sound file, the **LOOP** attribute specifies how many times it plays ('-1' or INFINITE causes it to play 'infinitely'), and the **DELAY** attribute lets you specify the number of seconds between repetitions of the sound file. This element has no content. It must appear before any 'block' elements in the **BODY** element.

Working with files

This chapter discusses the H.*i*.P. Editor commands for creating, opening, closing, and saving files, previewing the current document with a browser, and checking document correctness.

Creating a new file

To create a new file:

- Click on the ▢ toolbar button.

Or:

- Choose **New...** from the **File** menu.

Or:

- Type (Ctrl-N) .

The H.*i*.P. Editor will open an HTML document. This document is the 'default template'. If you want to specify a different document (perhaps containing markup that you use on a regular basis) as the default template, do so by choosing **Options** from the **Special** menu., and editing the options in the **Defaults for New/Open** tab. You can configure several other options for new files in the H.*i*.P. Editor in this dialog.

Any new document you create in the H.i.P. Editor is a plain HTML document until you add any SoftQuad H.i.P. extensions such as pop-ups, multilocs, or Live TOCs and H.i.P.-ify the document when you save it (see page 249).

Using templates

Templates are pre-defined structures for documents. They are used as forms or document outlines into which you can enter text without necessarily having to insert any of the markup yourself. If you have created a project using the H.i.P. Template Wizard from the H.i.P. Information Manager (see page 48), you can open the template files from the project directory.

> **Note** Unless you want to edit the templates themselves, do not open the template files directly from the Templates folder. These files should be first copied to the directory for the project based on the Template Wizard.

Opening a file

Choose **Open...** from the **File** menu, type (Ctrl+O), or click on the toolbar button to open an existing file.

By default, the **Open** dialog box in the H.i.P. Editor displays files with the *.htm*, and *.html* file extensions. The Editor will open both plain HTML and H.i.P. format documents with these file extensions. If the file is plain HTML the control icon at the left of the menu bar will be: ; if the file is in H.i.P. format, the icon will be: . If the file is plain HTML and you add H.i.P. extensions to it, you should H.i.P.-ify the file before you save it. If the file already contains H.i.P. extensions (has already been H.i.P.-ified), the H.i.P. Editor will just save it as a H.i.P. document.

You can choose the default folder and file extension for the **Open** dialog box using the **Extensions/Paths** section of the **Options** dialog. Choose an extension and path in the **Document** line.

When you open a file, the H.i.P. Editor converts the 'raw HTML' into a graphical format in which the tags are replaced by tag icons, and the H.i.P. Editor's graphical editing features are available. You cannot open a file that's already open.

The names of the last four files that you opened with the H.i.P. Editor are added to the **File** menu. You can open a file (or make it the current file, if it's already open) by choosing it from this menu.

You can also launch the H.i.P. Editor and open a file from the H.i.P. Information Manager by:

- Double-clicking on the file in the project panel.

Or:

- Selecting the file in the project panel, cyberbolic or tree display and then doing one of the following:

    - clicking on the (launch editor) toolbar button

    - choosing **Edit** from the **File** menu

    - right-clicking and choosing **Edit** from the pop-up menu

Conversion from other formats

The **Open...** command has several built-in filters that let you open files in other word-processing formats, as well as plain text. These files are converted into HTML. If you want to open a file format other than HTML, choose the file extension from the **Files of Type** drop-down list. In any case, the conversion program determines the file format automatically.

By default, the H.i.P. Editor will open documents in the following formats:

- □ plain text (text that is not marked up in HTML)
- □ AMI Pro (2.0, 3.0)
- □ MS Word for PC (2.0, 3.0, 4.0, 5.0, 5.5)
- □ MS Word for Windows (1.0, 1.1, 2.0, 6.0, 7.0)
- □ RTF
- □ WordPerfect for DOS/Windows (5.0, 5.1, 5.2, 6.0, 6.1)

In addition, any of the following formats will be supported if you did a *Custom Install* and chose them when you installed the H.i.P. Editor. If you have not installed these converters yet, and you wish to, go to **Custom Install** from the opening installer screen. You do not have to reinstall the H.i.P. Editor; you can choose to install all of the non-standard converters, or select only the ones you want.

MS Word for Macintosh	Office Writer
IBM DCA-RFT	Quadratron Q-ONE
DECdx (WPS-PLUS)	Cliq-Word
HP Word PC	Uniplex II Plus
IBM Displaywrite	Wang OIS/VS Com
MASS-11	WordMARC
MultiMate	WordStar
ODA FOD26	Wang WITA

You will get an error message if the file is not in one of the supported formats.

If a file is in an unsupported format, you may be able to open it and save it in a supported format with another application. For example, you cannot open an Microsoft Excel spreadsheet directly with the H.i.P. Editor, but you can open it with Microsoft Word and save it as a Word or RTF file, which *can* be opened with the H.i.P. Editor.

If a document contains a graphic in one of the supported graphics formats, it will be converted to GIF format and saved in a separate file. An IMG element whose URL contains the full path to the GIF will be placed in the converted document. The H.i.P. Editor will convert graphics in BMP, GIF, JPEG (JFIF), MacPaint, PCX, and TIFF format. In addition, the H.i.P. Editor can convert the raster, or bitmap-oriented, portions of the following complex graphic types: EPS, PICT, RTF, SDW (AMI Draw), WMF, and WPG (WordPerfect Graphics). The H.i.P. Editor will not convert vector, or outline-oriented, graphics in these formats, such as embedded pie-charts or equations.

Graphics that are inserted in word-processor files by means of links (rather than inserted directly in the file) will *not* be converted.

When the H.i.P. Editor converts a word-processor file, paragraphs are converted to P elements, quoted paragraphs to BLOCKQUOTE, headings to H1-H6, numbered lists to OL, bulleted lists to UL, bold text to B, italic text to I, graphics to IMG, and tables to HTML tables.

The conversion program uses various guidelines to decide how to perform the conversions; because word-processor files tend to be less structured than HTML, you will probably need to do some refinement of the markup using the H.i.P. Editor's markup tools. Also, the conversion doesn't employ the full HTML element set so you may wish to use 'richer' markup. In any case, you should always review the converted file before putting it on your intranet.

You can configure how the H.i.P. Editor converts paragraphs, blockquotes, and headings by editing a configuration file. See *Appendix 2: File conversion* (page 407) for more information.

Error checking

If a H.i.P. or HTML file contains markup errors, the H.i.P. Editor will try to rearrange the markup so that the file can be opened and displayed in graphical format. In those situations, the H.i.P. Editor will usually succeed in creating a valid file, although you may have to adjust some of the markup manually. If the H.i.P. Editor cannot turn on *rules checking* (see page 271), it will give a warning message informing you of the problem, and the insertion point will move to the location of the error.

In some cases rules checking can be turned on but the file will not *validate* (see page 271). This normally means that some element is missing a *required sub-element* or a *required attribute*: for example, an OL might not have any LI elements in it, or an INPUT element may be missing a value for the NAME attribute. The H.i.P. Editor does not inform you automatically if the file will not validate: you can check if the file validates by choosing Validate Document from the Special menu.

If the H.i.P. Editor encounters an HTML error that is so serious that the file cannot be opened in graphical format (for example, if the file contains a non-HTML element), it will open the file as a text file. This gives you the opportunity to correct the error manually. After you've done so, choose Interpret Document from the Special menu. If the document contains no more errors, this performs the equivalent of Open... on the text document. Otherwise, you will get a message indicating the next error.

Common 'Open' error messages

If the H.i.P. Editor encounters an element at a location in which it doesn't belong according to the HTML rules, it will try to move the element to the next valid location. If it is unable to do so, the file will be opened, but rules checking will not be turned on. The insertion point will be placed at the location of the invalid element, and you will get an error message such as the following:

```
Rules checking cannot be turned on: an invalid
element "INPUT" was found.
```

This error message indicates that the element called INPUT was found at an invalid location. The solution is to move the element to a location where it is allowed (in this case, inside a FORM), and then turn rules checking back on by choosing Turn Rules Checking On from the Special menu.

There are a number of errors that will prevent the H.i.P. Editor from being able to open the file in graphical format. In this case, you will get an error message, the file will be opened in text format, and the insertion point will move to the location of the error. After you correct the error, you should choose Interpret Document from the Special menu to do the equivalent of Open... on the text document.

All of these error messages will give the location in the document where the error occurred. For example:

```
Error at offset 211 of the input stream, on
line 6 of the document instance:
```

This means that the H.i.P. Editor detected the error on line 6 of the document, after reading 211 characters. You don't actually have to count the lines and characters to find the error, because the H.i.P. Editor will position the insertion point at the location of the error.

The remainder of the error message describes the specific error that occurred. Here are some common errors:

Unknown element

```
Unknown Element. The element "ENTER" is
not defined in the rules file.
```

This means that the H.i.P. Editor discovered an element that is not a valid HTML element. This can occur if the document contains a new proprietary extension element that is not currently supported by the H.i.P. Editor, or if a sequence of characters starts with the '<' character. In this example, the H.i.P. Editor detected an element called ENTER because the document contained the phrase '<Enter>'. The solution is to substitute

the *character entity* '>' for the '<' character. That is, type the characters '>' instead of '<'; this expression will be displayed as '<' in the H.*i*.P. Editor and in the browser. If the problem is that a proprietary extension was used, you may wish to remove just the start- and end-tags of the non-HTML element, or remove the contents too.

Bad or missing name

```
Bad or missing attribute name.
Attribute "TYP" is not defined in the
attribute list.
```

This error will occur if an element has an invalid attribute *name*. This may be because the document is using a new proprietary extension attribute that is not supported by the H.*i*.P. Editor, or it may simply be the result of a typing error. For example:

```
<INPUT TYP="TEXT">
```

Here the attribute name should be TYPE, not TYP. Correct the attribute name and choose **Interpret Document**. If the document contains an unsupported extension, you will have to remove the attribute name and its assigned value.

End of file

End of file in literal string.

This error will occur if an attribute value in the document starts with a double quote, but doesn't end with one. For example:

```
<INPUT
TYPE="TEXT>
```

The value TEXT should have a double quote at the end. Insert the missing double quote and choose **Interpret Document**.

Bad start tag

Bad start tag.

This error can occur if you have some unusual invalid markup that causes the H.i.P. Editor to infer that one element has been closed, and another one should start. For example:

```
<INPUT TYPE="TEXT" &eacute;
```

The solution in this case is to properly terminate the **INPUT** element, i.e.:

```
<INPUT TYPE="TEXT"> &eacute;
```

Bad or missing
attribute value

Bad or missing attribute value.
Attribute name "HELLO" is not in any name
group in the attribute list for this element.

This error can occur if a start tag is not terminated properly, so that some following text appears to be the value one of the element's attributes. For example:

```
<P Hello
```

The solution is to properly terminate the **INPUT** element, i.e.:

```
<P> Hello
```

Saving files

The Save command, $\boxed{\text{Ctrl+S}}$, or the ▣ toolbar button saves the current file (that is, the file that is open in the active document window) to the disk. If you have not added any H.i.P. extensions that are required to view the document in the H.i.P. Viewer, the file will be saved as a plain HTML document. If you have not added any H.i.P. extensions but want the file to display a Live TOC in the H.i.P. Viewer, you will have to H.i.P.-ify the file when you save it. This adds some special markup that tells the other components of H.i.P. that to read it as a H.i.P. document. If you *have* added features that can only be displayed by the H.i.P. Viewer, (e.g., pop-ups, Live TOCs) you *must* H.i.P.-ify the document before you save it.

If you have not previously saved the file, you will be first prompted to edit the document properties (see page 185), then to enter a name for the file.

You can configure the H.i.P. Editor not to prompt you for document properties on saving:

- Choose Options... from the Special menu.
- Choose the General options tab.
- Click on the Show Document Properties on SaveAs check box to remove the check mark.

If you are running the H.i.P. Editor from the H.i.P. Information Manager (i.e., working on a H.i.P. project), when you save the file, a notice will appear telling you that the Information Manager is reloading the project. This means that your changes to links, etc., if any, are being updated.

H.i.P.-ify your documents

As we explained on page 165, H.i.P. documents contain special markup that allows users to view them in the H.i.P. Viewer and access all of the features of SoftQuad H.i.P. When you work in the H.i.P. Editor, it makes no difference whether the file is in plain HTML or H.i.P. format, but if you want to make use of H.i.P. features, you have to H.i.P.-ify the document. This is done using the Convert to H.i.P. command in the File menu. If your document is already in H.i.P. format the command will read Convert from H.i.P.. To H.i.P.-ify your document:

- Choose Convert to H.i.P. from the File menu.

Although nothing seems to have happened, the H.i.P. Editor has placed hidden markup in your document to allow it to be viewable in the H.i.P.

Viewer. The command will now toggle to **Convert from H.i.P.**. Now when you save your document it will be viewable in the H.*i*.P. Viewer and will have a different icon from a plain HTML document in the H.*i*.P. Information Manager.

If you have rules checking turned on, the file will be validated when you save it, and you will be warned if there are errors and asked if you still want to save. If you do, the saved file will be invalid and the H.*i*.P. Editor may have trouble opening it in the future.

To save the file under a new name, choose **Save As...** from the **File** menu.

You can choose the default folder for the **Save** and **Save As** dialog boxes in the **Extensions/Paths** section of the **Options** dialog box.

> **Note** A 'document type declaration' (DOCTYPE) will be saved at the top of the file. This declaration is ignored by most browsers, but is used if your document is read by an SGML system.

Save options

There are a couple of options for saving files that you can set in the **Save** section of the **Options** dialog box.

☐ Click on the check box labeled **Add Line Breaks** if you want the H.*i*.P. Editor to insert line breaks after a specified number of characters in a line. To set the maximum line-length, enter the length in the **Maximum Line Length** text box. (The default is 80 characters.) This may improve readability of the HTML code when viewing it with a text editor. The H.*i*.P. Editor will not insert a line break where it would create invalid markup.

☐ Make a choice from the **End of line options** to chose the line-end characters for the exported file. Depending on the kind of Web server your HTML file will reside on, you may want to choose UNIX, Macintosh, or Windows-style line breaks.

Backups

If you want the H.*i*.P. Editor to make a backup file each time it saves a file, turn on the check box labeled **Make backup file when saving changes** in the **Save** section of the **Options** dialog box. The backup file will be a copy of the *previously saved* version of the file. The name of the backup file will be the current filename, with the file extension changed to the backup file extension (by default this is *.bak*, but you can choose a different extension from the same section of the **Options** dialog).

Auto-saving

The H.*i*.P. Editor will save the current file automatically after a specified number of minutes or after a specified number of changes have been made to it. Enter the values you want to use in the appropriate text boxes in the **Save** section of the **Options** dialog box. The default values are 64000 changes and 1000 minutes. If you want the H.*i*.P. Editor to warn you each time it does an auto-save, turn on the **Inform when automatically saving** check box.

Printing

Choose the Print... command in the File menu to print one or more pages of the current document.

The following dialog box appears:

HP LaserJet 4/4M PostScript on \\sqrex\ps

Copies: 1

OK

Cancel

Pages
⦿ All
○ From: ___ To: ___

Left Header:
Middle Header:
Right Header:

Left Footer:
Middle Footer:
Right Footer:
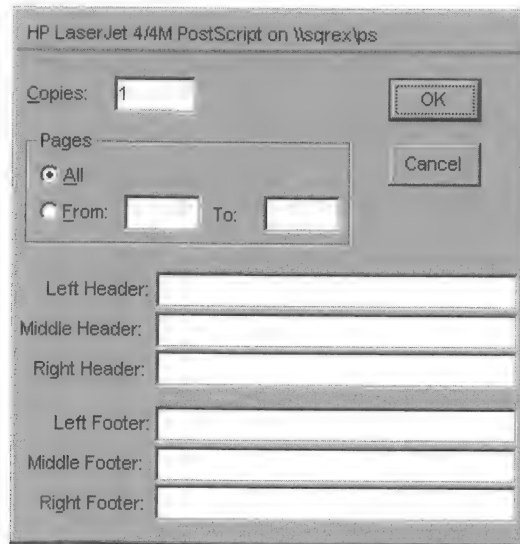
The six text boxes in the lower part of the dialog box allow you to describe the page header and footer by specifying the text of their left, middle, and right components.

There are a number of special strings you can put in headers and footers:

☐ $\%D$ – prints the system date

☐ $\%T$ – prints the system time

☐ $\%F$ – prints the file name

☐ $\%f$ – prints the full path and file name

☐ $\%M$ – prints the modification date of the file

☐ $\%P$ – prints the page number

The screen formatting options currently in use for the different elements (font, font size, line height, etc.) will appear in the printed output. If tag icons are currently displayed on the screen, they will be printed.

Choose the **Print Setup...** command to set options such as:

- Which printer to use.
- Whether to send the print job to a printer or to a file.
- Page orientation (portrait or landscape).
- Paper size.

Closing a file

The **Close** command in the **File** menu closes the current file. If the file has had changes made to it since it was last saved, you will be prompted to save the changes before closing it.

Exiting

The **Exit** command in the **File** quits the H.i.P. Editor. If any open files have been changed since the last time they were saved, you will be prompted to save them before exiting.

Marking up documents

The H.i.P. Editor essentially lets you do two things: edit the *content* and edit the *markup*. The content is just the text of the document. In an electronic document, markup consists of special codes inside the document that indicate how parts of the file should be processed. For example, a file created with a word-processor or desktop publisher contains markup indicating typographical features such as the font and font size. In a H.i.P. or HTML file, which is what the H.i.P. Editor creates, the markup consists of *elements*. Elements usually consist of a *start-tag* at the beginning of a section of the text, and an *end-tag* at the end of that section of text. Marking up a file in HTML mostly means surrounding the text with the appropriate elements. (In addition, there are a few elements that have special functions, such as specifying the location of an image.)

Elements also have *attributes* that tell the browser something about the element.

This chapter contains information on:

Styles or structure?

More than with conventional HTML files, H.*i*.P. lets you use elements for both the style and structure of your documents. Since H.*i*.P. has its own Viewer, the ability to combine structural and stylistic elements of your documents is much easier since you don't have to worry as much about the way different browsers treat conventional HTML markup.

The H.*i*.P. Editor approaches both the stylistic and structural aspects of HTML markup. In fact, the H.*i*.P. Editor lets you create your own custom-made elements (UDEs) to provide both detailed structure and extended style.

The commands in the Markup menu are oriented toward thinking of elements as structural objects; the buttons in the toolbars treat the elements like stylistic tools. This doesn't mean that you should stick to one or the other set of tools: it's better to understand both and use the one best suited to the task at hand. We'll explain more about this below.

Guidelines for creating accessible HTML pages

The following guidelines will help make your HTML pages more accessible to disabled users, particularly those who are 'reading' your pages with the aid of a screen reader and voice synthesizer.

Since H.*i*.P. supports document views, with which you can maintain separate versions of a document within the same file, you can provide accessible and 'non-accessible' versions of the same document without a lot of extra work.

You may find that some of these guidelines are helpful for all readers, especially those using non-graphical browsers such as Lynx.

1. Include an outline near the beginning of each document. This will aid users who are unable to quickly scan a document.
2. Provide a textual alternative to all graphical objects: In particular:
   - Use the ALT attribute to provide a textual description of all images (IMG elements).
   - Provide textual alternatives to image maps (for example, a list of links corresponding to the regions)
   - Provide alternative text for images used as 'buttons' or hot links.
   - Include transcripts or descriptions of movie and sound files.

3. Lists should be preceded by a label that tells the user that a list is about to begin, and indicates the number of items. For example:

```
List with
five items:
```

4. Number each list item.

5. Links (A elements) should contain meaningful text, not just a phrase such as 'Click here'.

6. Use only text-based input in forms (for example, use text fields instead of drop-down lists).

7. Avoid using tables; display tabular information in an element such as PRE.

8. Use background images and color that contrast well with the text.

> **Note** These guidelines were provided by the Adaptive Technology Research Centre at the University of Toronto. For more information, see http://www.utoronto.ca/atrc.

The H.i.P. Editor helps you evaluate the *accessibility* of your markup by letting you check the markup according to the above guidelines. Please see the section on validating for accessibility (this page) for more information.

Validating for accessibility

People with disabilities often use special technology to give them access to HTML documents. As a result, some features of HTML and H.i.P. documents should conform to rules for accessibility. For example, many people assume that, with the increasing numbers of people using graphical browsers, the alternative text (ALT) attribute for images is no longer necessary. Some accessibility technologies, however, make use of the ALT attribute for users with impaired vision.

You can ensure that your document is accessible to people with disabilities by choosing Validate for Accessibility from the Special menu. If your document is not marked-up to be accessible for people with disabilities, a message will appear telling you the accessibility problem:
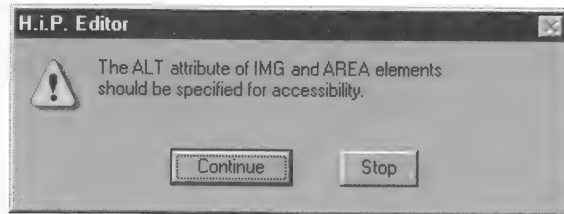
If your document does not validate, it does not mean that the HTML markup is incorrect. It is merely advising you that your document could be marked up to be more accessible to people with disabilities.

HTML rules

As with conventional HTML, the elements in H.i.P. documents must be arranged according to certain rules: otherwise, the document is considered invalid. When you are using the H.i.P. Editor, you don't have to keep track of these rules yourself—the H.i.P. Editor does it for you. One of the H.i.P. Editor's most important features is automatic *rules checking*, which ensures that you do not violate the required structure as you are creating a document. As well, when you open or save a document, the H.i.P. Editor checks that the markup is correct and complete.

The document-structuring rules built in to the H.i.P. Editor are designed to be flexible while at the same time maintaining a useful document structure. If an existing HTML document does not conform to these rules, the H.i.P. Editor's **Open...** command will attempt to open it anyway, adjusting the markup so that it conforms as closely as possible to the HTML rules. If there are serious errors, the document is opened as a text document and can be edited 'by hand'. Once the errors are fixed, you can use the **Interpret Document** command to do the equivalent of **Open...** on the text file.

Using the toolbars to create markup

The H.i.P. Editor has three toolbars for creating elements. The 'Common HTML' toolbar contains buttons for creating the most common HTML elements. This toolbar is the second one from the top in the default screen configuration. The 'Other HTML' toolbar (the second from the bottom in the default configuration) has buttons for the less commonly used HTML elements, and the 'Forms' toolbar has buttons for the creation of forms, tables, and other block elements that are extensions to HTML 2.0. The 'Forms' toolbar also contains buttons for inserting H.i.P. multilocs and pop-ups.

Most of the buttons in these toolbars represent a single element: to create an element, just click on the button. There are also four buttons that represent a *group* of related elements. These are wider than the others and consist of an icon with a downward-pointing arrow at the right. Clicking on one of these buttons while keeping the mouse button down will bring up a menu of elements that you can choose from. A single, quick click on one of these buttons will cause its *default element* to be created. The default is the element that was most recently chosen from the menu, or the first element in the menu if this button hasn't been used yet in this the H.i.P. Editor session.

Depending on the context, the H.i.P. Editor will do one of the following when you try to create an element from the toolbar:

☐   *Insert* the chosen element at the insertion point.

☐   *Insert* the chosen element after the current element.

☐   *Surround* the selection with the chosen element.

☐   *Change* the current element to the chosen element.

☐   *Split* the current element.

☐   Nothing, if any action the button could perform would leave the document incorrectly marked up.

If there is no valid action that a button can perform at the current location in the document, the H.i.P. Editor will beep if you click on the button.

The H.i.P. Editor uses the following guidelines when determining which action to take; the *first* valid action from this list is the one that's carried out.

1. If the document contains a selection (highlighted text and/or elements), and the HTML rules will allow the chosen element to surround the selection, then the selection will be surrounded. For example, if there is a selection inside a P element, and you try to create an EM element, the EM will surround the selection.

2. If there is *no* selection, and the HTML rules will allow the chosen element to be inserted, then the element will be inserted at the current insertion point. For example, if the current element is P and you try to create an EM element, the EM will be inserted.

3. If the current element and the chosen element are of the same type, and it is not valid to nest one inside the other, the current element will be *split* into two elements at the start of the selection or insertion point. Everything before the start of the selection (or insertion point) will be in the first element, and everything after it will be in the second element. For example, suppose you have a P element containing the text 'hello world', with the insertion point between the two words: if you try to create another P, you will get two paragraphs, the first containing 'hello', and the second containing 'world'. However, if the current element is A or IMG, clicking on the ![] or ![] button, respectively, is the equivalent of choosing the Edit URL... command.

4. If it is valid to *replace* the current element with the chosen element, the replacement will be carried out. For example, if the current element is H2 and you click on the ![H1] button, the current element will change to H1.

5. If the insertion point is directly before the end-tag of the current element, and it is valid to insert the chosen element after the current element, but not inside it, the insertion will be performed. For example, if you have a P element with some text in it, with the insertion point just before the ⟨ /P ⟩ tag, and you click on the ![] button, the H.i.P. Editor will insert a BLOCKQUOTE element after the P.

The differences between using the toolbar buttons to create markup and using the commands from the **Markup** menu are that these commands:

☐ Perform more restricted functions (insert/surround with **Insert Element...**, change with **Change Element...**).

☐ Provide a list only of the elements that can be validly inserted, or replace the current element.

Inserting an element

You can insert an element from the toolbar or by using the **Insert Element...** command in the **Markup** menu.

Each of these methods has a dual function: if the document contains a selection (highlighted text or elements) the element you choose will surround the selection; if there is no selection, an empty element will be inserted.

There are also some situations in which the H.i.P. Editor will insert an element automatically (see page 263).

From the toolbar

To insert an element using the toolbar, just place the insertion point or selection in the desired location in the document and click on that element's toolbar button. The element will be inserted (surrounding the selection if there is one) unless this would cause the document to be incorrectly marked up. In that situation, the H.i.P. Editor will change or split the current element, as appropriate, or beep to indicate that no valid action can be carried out. If rules checking is turned off, the insertion will succeed except when you try to surround something with an element (such as **IMG**) that can never have content.

From the menu

When you choose the Insert Element... command, click on the ⬚ tool-bar button, or type ⟨ Ctrl-I ⟩, you get the Insert Element dialog box, which contains a list of the elements permitted by the HTML rules at the location of the insertion point (or selection) in the document. The name of the first element (if there is one) *required* by the HTML rules at this point in the document will be followed in the list by the '<' character.
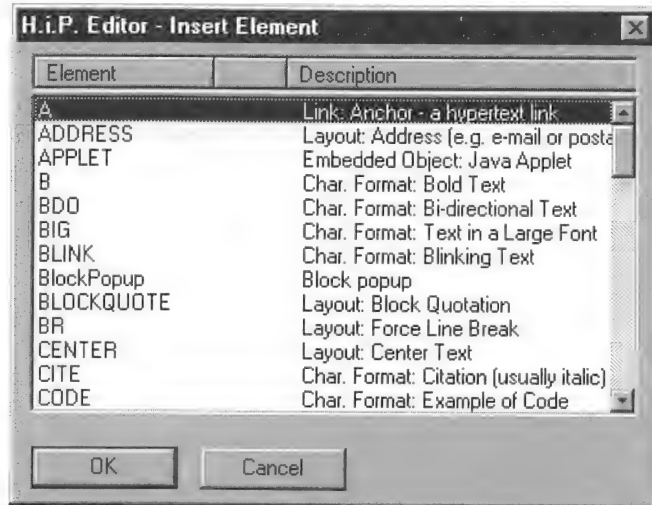
Element	Description
A	Link: Anchor - a hypertext link
ADDRESS	Layout: Address (e.g. e-mail or posta
APPLET	Embedded Object: Java Applet
B	Char. Format: Bold Text
BDO	Char. Format: Bi-directional Text
BIG	Char. Format: Text in a Large Font
BLINK	Char. Format: Blinking Text
BlockPopup	Block popup
BLOCKQUOTE	Layout: Block Quotation
BR	Layout: Force Line Break
CENTER	Layout: Center Text
CITE	Char. Format: Citation (usually italic)
CODE	Char. Format: Example of Code

H.i.P. Editor - Insert Element

[OK]   [Cancel]

You will probably find this dialog box more convenient to use if you *pin* it to the screen—see page 182. A pinned dialog box will stay up on the screen after you perform an action. You can move the dialog to a convenient location on the screen so that it doesn't cover part of the document window.

To select an element, click once on the line containing the element name, or type the first characters of the element name until the correct element is selected. Then click once on the ⟨ Insert ⟩ button to insert it. Alternatively, you can double-click on the line that contains the element name. Since this dialog box displays only the elements that can validly be inserted, the insertion will always take place.

Insert Element... will be disabled and the menu item grayed-out if there are *no* elements that can be inserted at the insertion point or current selection without creating an incorrectly marked up document. Often the command will become enabled if rules checking is turned off, but there

are some elements in which you will never be allowed to insert an element.

There are some circumstances where the H.i.P. Editor will insert an element for you because the HTML rules require it.

☐ If you insert an element, such as UL, that has a *required sub-element* (in this case, LI), the H.i.P. Editor will insert the required sub-element inside the element you chose. You can turn off this behavior by turning off the **Include required elements** option in the **General** section of the **Options** dialog box.

☐ If you type inside an element that cannot contain text directly, but has a possible sub-element that *can* contain text, the H.i.P. Editor will, in some circumstances, surround what you've typed with that element. For example, if you type directly inside a BODY element, the H.i.P. Editor will surround the text with a P. If you type directly inside a UL or OL, the H.i.P. Editor will surround the text with an LI element.

☐ Similarly, if you try to insert an element where it's not permitted, the H.i.P. Editor will, if possible, surround it with an element that can validly appear at the current location. For example, if you try to insert an EM directly inside BODY, the H.i.P. Editor will surround it with a P.

☐ If you try to type in an element that cannot have any content, the H.i.P. Editor will, in some circumstances, try to surround what you've typed with an element located *after* the element you typed in. For example, if you type in an IMG that is located directly inside a BODY, the H.i.P. Editor will insert a P after the IMG, containing the text you typed. (If the IMG is already inside an element that can contain text, the H.i.P. Editor will just move the insertion point after the ⟨/IMG⟩ end-tag, and insert the text there.)

Changing the element type

You can change the element type from the toolbar or by using the **Change Element...** command in the **Markup** menu.

From the toolbar

To change an element using the toolbar, place the insertion point or selection in the element you want to change (the element must be the *current element*, i.e., the innermost element containing the insertion point or selection; the name of the current element is displayed in the mini-context area at the bottom left of the document window). Then click on the toolbar button for the element you want to change it to. Remember that when you use the toolbar, the H.i.P. Editor will first try to *insert* the element you click on, and it will *change* the current element type only if the insertion would be invalid. For example, if the current element is **P** and you click on the toolbar button for **EM**, the H.i.P. Editor will insert an **EM**, but if you click on the (address) button, the **P** will change to **ADDRESS**.

If rules checking is turned off, clicking on a toolbar button will almost always cause the H.i.P. Editor to perform an *insertion*, rather than a change. The exception is when the current element is one that cannot have any content (for example, **IMG**).

From the menu

When you choose the **Change Element...** command (or type `Ctrl-L`), the H.i.P. Editor gives you a dialog box containing a list of elements that can replace the current element and still leave the document correctly marked up.

You will probably find this dialog box more convenient to use if you *pin* it to the screen—see page 182. A pinned dialog box will stay up on the screen after you perform an action. You can move the dialog to a convenient location on the screen so that it doesn't cover part of the document window.

To select an element, click once on the line containing the element name, or type the first characters of the element name until the correct element is selected. Then click once on the `Change` button to insert it. Alternatively, you can double-click on the line that contains the element name.

Since this dialog box displays only the elements that can validly substitute for the current element, the change operation will always take place.

The command will be disabled and the menu item grayed-out if there are *no* elements that can replace the current element without creating an incorrectly marked up document. Often the command will become enabled if rules checking is turned off, but if the current element has *any* content you cannot change it to an element that can never have content.

Splitting an element

Splitting an element literally means breaking it into two elements at the current insertion point or selection. This creates two elements of the same type as the current element, one containing all of the content before the beginning of the insertion point or selection and the other containing the remaining content.

If the insertion point is directly before an end-tag (for example, when you are typing at the end of a paragraph) then splitting creates a new, empty element with the same type as the current element. In fact, the most common use for splitting is to start a new paragraph.

Typing Return or Enter inside most elements will cause them to be split. The exceptions are elements for which you've set the *fill mode* (see page 351) to 'no fill' with the Format Editor Display... command—line endings are significant for these elements (e.g., PRE).

You can also split an element by choosing the Split Element command in the Markup menu, or by typing Ctrl-P . This will split the element regardless of its fill mode.

If rules checking is turned on, you can't split an element if this would cause the document to be invalid (for example, you cannot split the HEAD element). You can split any element if rules checking is turned off.

When you split an element that has attributes, both of the resulting elements will adopt the attributes of the original element.

Joining elements

The H.i.P. Editor lets you join the current element and the preceding element, provided they are of the same type—two paragraphs, for example, or two list items.

☐ Backspacing over the start-tag of the second element will join the two elements.

☐ If you choose **Join to Preceding** from the **Markup** menu (or type ⌐Ctrl-J⌐ at the keyboard) the H.i.P. Editor will join the two elements.

You cannot join two elements if there is any text other than 'white space' (spaces, tabs or carriage returns) between the two of them. (Any white space between the elements will be condensed to a single blank space if the join operation succeeds.)

If the elements have attributes, then the attributes of the first element will be adopted for the new, combined element.

Removing tags

Choosing **Remove Tags** from the **Markup** menu, clicking on the ▨ toolbar button, or typing ⌐Ctrl-D⌐ at the keyboard deletes the start- and end-tags of the current element without affecting its contents.

The command will be disabled if deleting the tags will leave the document incorrectly marked up. However, it will always be enabled if rules checking is turned off.

If an element has no content, backspacing over its start- or end-tag will delete the element.

Attributes

Elements can have *content* (text and sub-elements contained in the element) and *attributes*. An attribute is a piece of information about the element that does not appear in the content of the element. The most common uses for attributes are:

– HTML forms

– Setting the browser background (page 213)

– Setting the browser text colors (page 214)

– Setting the alignment of various elements (page 215)

To edit an element's attributes:

■ Put the insertion point inside the element whose attributes you want to edit (you must make this element the *current element*, the one whose name is displayed in the mini-context area at the bottom left of the document window; you can ensure this by putting the insertion point directly to the right of the element's start-tag).

Now:

■ Choose **Element Attributes...** from the **Markup** menu.

Or:

■ Right-click inside the element and choose **Element Attributes...** from the pop-up menu.

Or:

■ Type ⬚F6⬚ at the keyboard.

The **Attributes** dialog box lets you see what the attribute values are and also edit them. If the current element has one or more attributes, then the **Element Attributes...** command in the **Markup** menu will be enabled (whether or not the attributes have been given values).

Editing attributes

Each element type has a different set of attributes: for this reason, the **Attributes** dialog box will be different for each type of element.

If you *pin* this dialog box (see page 182) you can move the insertion point into another element of the same type and the dialog will stay up on the screen. If you move the insertion point to an element of a different type, the dialog box will always be dismissed.

The dialog box contains an entry for each attribute of the current element. Each entry starts with the attribute name, followed by either a text box or a pop-up menu, depending on what kind of value the HTML rules say the attribute must have. The attribute value may be text or a choice from a list of values.

The list of attributes for the **INPUT** element shows both possibilities:

H.i.P. Editor - INPUT Attributes		
TYPE	TEXT	ONBLUR
NAME		ONCHANGE
VALUE		ONSELECT
SRC		BORDER
CHECKED	Unspecified	HEIGHT
SIZE		WIDTH
MAXLENGTH		ID — ID
ALIGN	Unspecified	LANG — en.us
ACCEPT		STYLE
ACCEPT-CHARSET		DIR — Unspecified
ONCLICK		CLASS
ONFOCUS		
Apply Reset Cancel		

TYPE, CHECKED, ALIGN and **DIR** are chosen from a list, while the values for the other attributes are typed directly in the corresponding text boxes.

■ When you have entered the desired attribute values, click on the ⎡Apply⎤ button.

If you insert an element that has a required attribute, the H.i.P. Editor will display the **Edit Attributes** dialog box automatically.

When not to use 'Element Attributes...'

Some elements whose attributes are modified frequently have a special interface for editing some or all of their attributes. You should not use **Element Attributes...** to edit the attributes of these elements. In particular:

☐ The IMG element has an **Image Attributes** dialog box. To open this dialog box, double-click on the image, place your insertion point inside the image and choose **Image Attributes...** from the **Tools** menu, or right-click inside the IMG element and choose **Image Attributes...** from the pop-up menu.

☐ Attributes that represent URLs (e.g., in IMG and A elements) can be edited by choosing **Edit URL...** from the **Markup** menu.

☐ Graphical FORM elements have customized attribute editing dialog boxes, accessible by double-clicking on those elements.

☐ Attributes in tables, table rows, and table cells are set automatically when you edit their properties with **Table Properties...**, **Row Properties...**, and **Cell Properties...** in the **Tools** menu.

☐ APPLET and OBJECT (ActiveX) element attributes can be more easily edited using **Applet Parameters...** and **Object Parameters...** in the **Markup** menu. You can also access the **Object parameters...** dialog by right-clicking inside an object element.

☐ You can change certain attributes of the BODY that have to do with color and backgrounds by choosing **Document Colors...** from the **Format** menu.

'Special' characters

HTML supports the ISO 8859/1 character set (also called ISO Latin-1) and a number of other 'special' characters. To enter a 'special' character (one that doesn't have a key on your keyboard) you can:

– Hold down the ⎡Alt⎤ key while typing (from the numeric keypad) a zero followed by the ANSI numeric code for the character you want. For example, ⎡Alt⎤ + '0233' will enter the 'é' character.

– Choose Special Characters... from the Markup menu, or click on the ⎡æ⎤ toolbar button. This gives you a palette for special characters:

```
Special Characters
¡  ¿  ¢  £  ¤  ¥
¶  §  ©  ®  ª  º
«  »  µ  °  ·  ‹
×  ÷  ±  ¹  ²  ³
¼  ½  ¾  ¦  À  Á
Â  Ã  Ä  Å  Æ  Ç
È  É  Ê  Ë  Ì  Í
Î  Ï  Ð  Ñ  Ò  Ó
Ô  Õ  Ö  Ø  Ù  Ú
Û  Ü  Ý  Þ  ß  à
á  â  ã  ä  å  æ
ç  è  é  ê  ë  ì
í  î  ï  ð  ñ  ò
ó  ô  õ  ö  ø  ù
ú  û  ü  ý  þ  ÿ
```

Click on a character with the mouse to insert it.

To dismiss the Special Characters palette,

▪ Double-click on the control button in the upper left corner of the palette.

Note When you save a file, non-ASCII characters will be converted to entities. For example, 'é' will be converted to the entity definition that Web browsers can read: 'é'.

HTML comments

You can insert HTML comments in your document by choosing the Insert Comment command in the Markup menu, typing ⟨F8⟩ or clicking on the ▨ toolbar button.

Comments, which can contain only text, are notes that can be toggled visible in the H.i.P. Editor using the Show Comments command, but are not displayed by browsers.

> **Note** Because of the way comments are represented in HTML, you should not put two hyphens in a row, '--', inside a comment. This could cause the markup to be invalid.

Checking the markup

One of the H.i.P. Editor's most important features is that it can prevent you from creating invalid HTML markup: *rules checking* prevents markup errors as you're editing, and *validation* ensures that the markup is correct and complete. The H.i.P. Editor also lets you validate the document for *accessibility* by people with disabilities.

Rules checking

The Turn Rules Checking On/Off command in the Special menu toggles the state of rules checking in the H.i.P. Editor. The current rules checking state is displayed in the lower right corner of the status bar.

Normally you should work with rules checking turned on. When rules checking is on, the H.i.P. Editor ensures that the document being edited will be correctly marked up—only elements that are allowed at a particular point can be inserted. While this checking is not complete, it will nevertheless catch and prevent most markup errors.

There are occasions when rules checking can get in the way of the job at hand. Most commonly this happens when the operation that you are performing involves two or more steps, and one of those intermediate steps will leave the document temporarily incorrectly marked up.

You should *not* turn rules checking off whenever the H.*i*.P. Editor prevents you from inserting something. The HTML rules are flexible enough that you can generally achieve the effect you want without violating the rules. For example, a list cannot be inserted inside a paragraph, but you can split the paragraph into two paragraphs and insert the list between them. If you create a document with rules checking turned off, you may have a problem opening it again with the H.*i*.P. Editor, and furthermore a browser may not display the file as you had intended.

The H.*i*.P. Editor prevents markup errors in a number of ways.

- The commands that could cause errors are disabled. For example, the **Insert Element...** command in the **Markup** menu will be grayed-out if there is no element that could be validly inserted at the insertion point.

- A restricted list of elements is presented. For example, the **Insert Element...** command will display a list containing only those elements that will leave the document correctly tagged after the insertion.

- You are given an opportunity to cancel a command before any damage is done. For example, if a **Paste** operation would leave the document incorrectly tagged, the H.*i*.P. Editor will display a warning dialog giving you the choice of canceling the paste or completing the command after first turning rules checking off.

When the rules are not being checked, the commands that were previously disabled will usually become enabled; for the exceptions, see the documentation on the individual commands. This means that you will be able to create an incorrectly tagged document, and therefore you should leave the rules off only as long as you need to.

When you choose **Turn Rules Checking On** from the menu, the menu item changes to **Turn Rules Checking Off** to indicate that this state can be toggled. When you turn rules checking back on, the H.*i*.P. Editor will quickly scan your document to make sure it is correctly tagged. If it isn't, the H.*i*.P. Editor will present a warning describing the problem, and the insertion point will move to the location of the error. Rules checking will remain off. Select **Turn Rules Checking On** again after the problem has been corrected.

Validation

Choose **Validate Document** in the **Special** menu or click on the ![icon] to verify that the markup in a document is correct and complete.

If the validation process finds an error in the document, you will be notified of the error and the insertion point will move to the place where the error occurred.

The purpose of the **Validate Document** command is to catch and report any markup errors not found by the rules checking. It will check that:

☐ All required elements are present. For example, if the document contains an OL (ordered list) element that doesn't contain at least one LI (list item) element, validation will detect this.

☐ All required attributes are present. For example, an IMG element must have a value for the attribute SRC (this represents the URL for the image, and is filled in automatically if you choose an image when you create the IMG element).

If your document contains a selection, the menu item will read **Validate Selection**. In this case, only the selection will be validated.

Validation and extensions to HTML 2.0

Your H.i.P. document will likely contain elements or attributes that are extensions to the HTML 2.0 specifications. This will not prevent the document from validating, but the H.i.P. Editor will inform you that the document contains non-HTML 2.0 features. Click on [More...] if you want more information; the following dialog box appears:
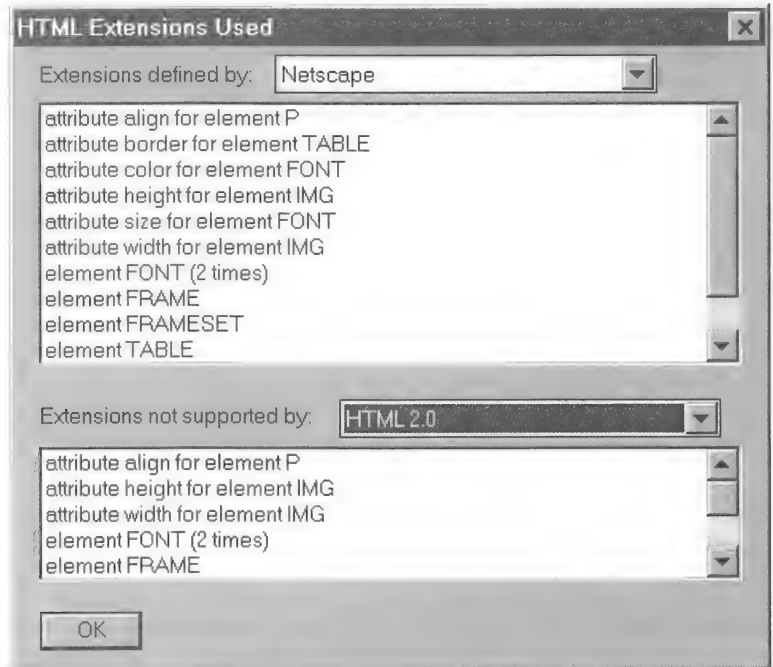
The **HTML Extensions Used** dialog box gives you a detailed explanation of the HTML extensions in your document.

The **Extensions defined by** section of the dialog box tells you which extensions *used in your document* are supported by a particular browser or rules file: for example, if you want to see which extensions are supported by Netscape Navigator, choose **Netscape** from the drop-down list.

The **Extensions not supported by** tells you which extensions used in your document are *not* supported by a particular browser or rules file: for example, if you want to see which extensions are not supported by the HTML 3.2 DTD, choose **HTML 3.2** from the drop-down list.

Links

Links are one of the most important features of HTML, because they allow HTML documents to function as hypertext documents. Links are created using elements that have URLs (Uniform Resource Locators). A URL is the address of a file (and possibly a specific location in that file); it is written in a format that a Web or intranet server understands, and that a browser can use to access the file over the Web or intranet. An example of a URL is:

```
http://triptych.sq.com/doc/tutorial.htm
```

In SoftQuad H.i.P. you can create 'one-to-many links' or 'multilocs'. Multilocs are links from a single location in a H.i.P. document to many locations or documents which appear as a pop-up menu in the H.i.P. Viewer. The section on H.i.P. Extensions details how to use multilocs in your H.i.P. documents (see page 191).

Most of the H.i.P. Editor's commands for working with links are in the **Markup** menu.

Link elements

Certain designated 'link' elements can contain URLS. URLS are *attributes* of the element, which means that they are values that are associated with the element, but which are not part of the *content* of the element (that is, text or sub-elements).

The link elements are:

- ☐ **A** (anchor): this element is used whenever you want to make a hypertext link to another document, or to a specific location in another document or the current document. Since this element occurs so often there is a special command, **Insert Anchor...** in the **Markup** menu, for inserting it. You can also click on the toolbar button.

- ☐ **IMG**: this element is used to include a graphic file in an HTML document.

- ☐ **FORM**: this element's URL specifies a program on a Web or intranet server that the form should be sent to for processing. See the tutorial on forms for more information.

- ☐ **BASE**: you use this element if you need to record the current document's URL within the document itself. See the section *Relative URLs* (page 286) for more information.

- ☐ **INPUT**: this element is used to represent various types of graphical controls in a form. One of your options is to use this element to display an image, which can be clicked on to submit the form. (See page 209.)

- ☐ **LINK**: this 'head' element can contain URLS that indicate a relationship between the current document and other documents, For example, SoftQuad H.i.P. uses this element to attach Live TOCS, CSSs, etc. to a document. These LINK elements are easily configured in the **H.i.P. Document Properties** dialog (choose **Properties...** from the **File** menu (see page 185).

- ☐ **HR**: this element's URL can specify an image file to be used in place of the horizontal rule in capable browsers.

- ☐ **UL**: this element's URL specifies an image to be used as a list bullet in capable browsers.

- ☐ **LI**: this element's URL specifies an image to be used as a list bullet in capable browsers.

☐ FRAME: the URL specifies the document to be displayed initially in the frame window.

If the mouse pointer is over one of these elements, its URL is displayed in the message area of the the H.*i*.P. Editor window.

The parts of a URL

URLs can be divided into two groups: *complete* URLs and *relative* URLs. A complete URL contains the following parts:

☐ A *scheme* (e.g., *http*, *ftp*, *gopher*) that specifies how the browser should retrieve the file.

☐ A *server address* (e.g., *triptych.sq.com*) that specifies which server the file is located on.

☐ Optionally, the server address can have a *port number* attached to it:

```
triptych.sq.com:8888
```

A port number is required if the Web server is not running on the default port (that is, 80). This normally occurs only if the site has more than one server running on it.

☐ A *path*, a sequence of directories (folders), terminating with a *filename*. This specifies the file to be retrieved.

Consider the example at the beginning of this section:

```
http://triptych.sq.com/doc/tutorial.htm
```

Here the scheme is 'http', the server address is 'triptych.sq.com', and the path part of the URL is 'doc/tutorial.htm'.

> **Note** The path/filename is often omitted in the URL of a site's home page. The server will generally return a file—usually 'index.html'—by default. For example, 'http://www.sq.com/' is the URL for SoftQuad's home page.

A relative URL will be missing some of this information, and a browser will have to obtain the missing information from the URL of the document that contains the relative URL. For example, suppose the document *http://triptych.sq.com/doc/tutorial.htm* contains an anchor with the URL */authors/orwell.htm*. This URL contains a path and filename, but no server location. In this case, the browser will search for the document on

the same server as *tutorial.htm*, the file that contains the URL. This topic is covered in detail starting on page 286.

Creating links with the H.i.P. Editor

The H.i.P. Editor makes it easy to create and edit links. There are two ways to do this:

- If you want to make a link to a file on your system, you can drag and drop its icon into the H.i.P. Editor document window.
- Insert an A (or other link element) and edit its URL.

Creating links by dragging and dropping

You can create an anchor (A) or image (IMG) link by dragging a document or image icon into the H.i.P. Editor document window.

Dragging and dropping will create a *relative* URL when the document that you are working on has been saved, and will create a *complete* URL if the file you are working on has not been saved.

Inserting a link element

If you want to create an anchor (an A element):

- Click on the ⚓ toolbar button.

Or:

- Choose Insert Anchor... in the Markup menu.

The Edit URL dialog box appears automatically.

To insert an image (IMG element):

- Click on the 🖼 toolbar button.

The Image Attributes dialog box appears automatically.

If you want to create any other kind of link:

- Insert the link element using Insert Element..., the form editor, etc.
- Choose Edit URL... in the Markup menu. (If the current element is A, clicking on the ⚓ button is equivalent to choosing Edit URL....)

Editing URLs

To edit the URL of a link element (other than an image), choose **Edit URL...** from the **Markup** menu.

To edit the URL of an image, choose **Image Attributes...** from the **Tools** menu. The dialog box that appears lets you enter information used only for images. If you click on the [Edit URL...] button in this dialog box, you will get a dialog that is identical to the **Edit URL** dialog, with one exception, noted below. See the chapter *Working with images* (page 303) for more information.

The 'Edit URL' dialog box

The **Edit URL** dialog box contains the following controls for creating a URL:

☐ A drop-down list labeled **Scheme,** containing a list of schemes for URLs. The scheme describes how the information contained in the URL is to be used by a browser. Some common schemes are:

  – *file*: indicates a file on a local file system.

  – *ftp*: indicates an address on an *ftp* server.

  – *gopher*: indicates an address on a *gopher* server.

  – *http*: indicates an address on a WWW or intranet server.

  – *mailto*: indicates that the URL specifies a mail address (see page 289).

You can also type a scheme directly in the text box to the left of the drop-down list.

☐ The **Host** text box is for entering a server address, such as an intranet, WWW or *ftp* server, or the 'domain name' in a mail address.

□ The **Port** text box is for entering a port number.

□ The **Path** text box is for entering the filename (and often a path), or a user name in a mail address.

□ The ⌈ Choose File... ⌋ button to the right of the **Path** text box will bring up a file chooser dialog box. This dialog box can be used instead of the **Path** text box when the path component of the URL is a file on your system.

□ There is a drop-down list that lets you choose between **Name** and **Query**. If you want the URL to be a link to a specific location, choose **Name** and enter the name of the location in this text box. Do not enter the '#' character that separates the location name from the rest of the URL: the H.i.P. Editor will insert it for you when it creates the URL. (You can also use the **Name Target.../Connect Link** command pair to set up a link to a specific location. See the section *Pointing to a specific location* on page 283 for more information.) **Query** is used if you want to specify a query for a searching program.

> **Note** The dialog box used to edit the URL of an image (IMG) element does not have the 'Name/Query' control group.

Entering the URL

The H.i.P. Editor creates a URL with the correct syntax from the information you've entered. Suppose you have entered the following:

Scheme: http

Host: triptych.sq.com

Path: orwell\homage.htm

Name: catalunya

Edit URL	✕
Scheme:	http ▼
Host:	triptych.sq.com
Port:	
Path:	orwell\homage.htm Choose File...
Name: ▼	
OK	Hotlist... Add to Hotlist... Cancel

From this information, the H.*i*.P. Editor constructs this URL:

```
http://triptych.sq.com/orwell/homage.htm#catalunya
```

Notice that the H.*i*.P. Editor inserts the '/' between the host and the path. Since this scheme specifies that the path starts with a slash, you don't have to type it yourself. In fact, in this case, if you do start the name with a slash, the H.*i*.P. Editor will ignore it. The '\' in the path has been changed to a '/', as the URL syntax requires. the H.*i*.P. Editor also inserted the '#' before 'catalunya'.

> **Note** Certain characters will be converted into an 'escape sequence' if they are entered into the 'Edit URL' dialog box. In particular, a number sign (#) will be changed to '%23', and a space to '%20'. These forms are equivalent to the characters they replace and are interpreted correctly by all browsers.

Pasting a URL from another application

Sometimes you may wish to paste a URL—from another application or document, for example—rather than constructing it piece by piece. If you do this, you should paste the URL into the **Path** text box of the **Edit URL** dialog. The next time that you open the **Edit URL** dialog box for the element in question, each part of that URL—**Scheme, Host,** etc.—will be displayed in the correct text box in that dialog.

Filename format

The URL syntax requires that folder names in the filename part of the URL be separated by slashes, '/'. This is different from the Windows and DOS convention, which uses backslashes, '\'. If you use the H.*i*.P. Editor's **Edit URL...** command to create the URL, you can enter the filename using either of the two conventions, and the H.*i*.P. Editor will, if necessary, convert it to the standard URL format.

Similarly a drive name such as 'c:' in the filename should contain a vertical bar, '|', instead of a colon, e.g., 'c|'. This is because the colon is a special character in a URL and can appear only once, after the scheme. You can enter either a colon or a vertical bar, and the H.*i*.P. Editor will convert if necessary.

Here is an example of both of these points. If you enter the filename:

```
c:\luise\madness\gravity.htm
```

the H.*i*.P. Editor will convert this to:

```
c|/luise/madness/gravity.htm
```

Using the URL hotlist

The H.*i*.P. Editor lets you maintain a hotlist of frequently used URLs. When you need to insert one of these URLs, you can just pick it from the list instead of having to enter the information over again.

To add the URL you're currently editing to the hotlist:

- Enter the scheme, host, path, and name or query as needed.
- Click on the [Add to Hotlist...] button in the **Edit URL** dialog box.

You'll then see a dialog box that displays the URL and lets you enter a description. This description is how the URL will be displayed in the hotlist dialog box.

- Enter the description. If you leave the description blank, the URL itself will be used as the description.
- Click on the [OK] button.

To pick a URL from the hotlist:

- Click on the [Hotlist...] button in the **Edit URL** dialog box.
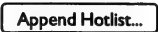
A dialog box will appear, displaying the description of each URL in the hotlist.

- Double-click on the URL you want. Alternatively, you can select a URL and click on the [OK] button.

To delete a URL from the hotlist:

- Click on the [Hotlist...] button in the **Edit URL** dialog box.
- Select the URL that you want to remove.
- Click on the [Delete from Hotlist] button.

To append a Mosaic hotlist or Netscape Navigator bookmarks file to the H.*i*.P. Editor hotlist:

- Click on the [Hotlist...] button in the **Edit URL** dialog box.
- Click on the [Append Hotlist...] button in the dialog box that appears.
- Choose the hotlist or bookmark file file that you want to append.
- Click on the [OK] button.

Pointing to a specific location

Here is an example of a URL that points to a specific location in a document:

`http://triptych.sq.com/authors/orwell/homage.html#madrid`

The characters '#madrid' at the end of this URL point to a specific location in the document that the URL refers to. For this link to work:

- The document *homage.html* must contain an anchor ('A' element) at the location you want to point to.
- The anchor must have the name 'madrid'. The next section explains how to assign an anchor name.
- If possible, this element should contain some text, as otherwise some browsers will not be able to locate it.

Creating 'source' and 'target' links in the H.i.P. Editor

In this section, the link that you click on to jump to a specific location is referred to as the 'source' link; the link that is at the location that you jump to is referred to as the 'target' link.

The quickest way to create the links is to use the **Name Target...** and **Connect Link** commands in the **Markup** menu (or the equivalent toolbar buttons).

- Put the insertion point or selection at the desired location of the target link.
- Click on the �ણ (**Name Target**) toolbar button.

The H.i.P. Editor gives you a dialog box in which to enter a name for the target link ('madrid' in the example above). If there is a selection when you click on the toolbar button, the first word in the selection will appear in the dialog box by default, but you can enter something else if you want. Link names typically consist of one word, but you can enter more.

- Enter a name of your choice and click on the [OK] button.

The H.i.P. Editor inserts an **A** element, surrounding the selection if there is one. (This element's **NAME** attribute will be set to the value you entered.)

- Put the insertion point or selection at the desired location of the 'source' link. This can be in the same document, or another document.

- Click on the (**Connect Link**) toolbar button.

The H.*i*.P. Editor inserts an A element, surrounding the selection if there is one. This element's URL will point to the target link. Since the 'path' part of this URL will refer to the local folder containing the document with the target link, you'll have to modify the URL before putting the document on your intranet server.

You can perform other actions in between creating the two links, but the H.*i*.P. Editor will remember only the most recent target link that you created with **Name Target...** (or the equivalent toolbar button).

If it's not convenient to use **Connect Link** (perhaps you want to enter all the target or source links first) you can use **Insert Anchor...** in the Markup or the equivalent toolbar button to create the source links. In this way you can create the links in any order. To create a source link:

- Put the insertion point or selection at the desired location of the source link.

- Click on the toolbar button.

The H.*i*.P. Editor inserts an A element and brings up the **Edit URL** dialog box.

- Enter the scheme, host, and path in the usual way.

- Choose **Name** from the drop-down list underneath the **Path** label (this should be the default).

- Enter the name of the target link in the text box to the right of **Name**.

- Click on OK .

Use **Name Target...** in the usual way to create the target links.

Syntax of URLs

The information in URLs has to be arranged in a way that the browsers and servers can understand it—in other words, it has to conform to the correct URL *syntax*.

Since the **Edit URL...** command helps you create URLs, you don't usually have to remember the details of the syntax: we've included this information here anyway because we believe that it will help you create URLs if you know what's really going on when you make a URL.

There are actually several URL formats, but fortunately most of the ones you'll have to use fall into two groups.

Files on a Web or intranet server

When you create a link to another H.i.P. or HTML document or to an image, you'll usually be specifying a file on an intranet server. In this case, the parts must be arranged in the following order:

1. The scheme, which will be *http*.
2. The characters ':://'.
3. The server address, e.g., *triptych.sq.com*.
4. The '/' character.
5. The path/filename.

The URL syntax requires that folder names in the path part of the URL be separated by slashes. This is different from the Windows and DOS convention, which uses backslashes, '\'. When you use the H.i.P. Editor's **Edit URL...** command to create the URL, if you enter the path using backslashes, the H.i.P. Editor will convert it to the standard URL format.

If you're creating this kind of URL with the **Edit URL...** command, choose the 'http' scheme. Then you just need to enter the server address and path/filename: the H.i.P. Editor will construct the URL for you.

Files on your hard disk

If a URL specifies a file on your local hard disk, rather than a file on an intranet server, you would write the URL a little differently. You can refer to a file on your local disk only while you're developing and testing your document. When the document is published on the Web, it should refer only to other files available over the Web.

1. The scheme for this kind of URL is *file*. This scheme is optional, however.

2. If you do use the *file* scheme, follow it with the characters ':///'.

3. Now you need to specify the drive name: instead of using the normal Windows format; e.g., 'c:', replace the ':' with a vertical bar; e.g., 'c|'.

4. Lastly, specify the path/filename. As described above, the standard URL format requires that you use the '/' in the path, but you can use '\' if you're entering the URL with the H.i.P. Editor's **Edit URL...** command.

An example of this kind of URL is:

```
file:///c|/shirley/orwell/homage.htm
```

If you're creating this kind of URL with the **Edit URL...** command, choose the 'file' scheme. Then you just need to enter the path/filename. Notice that you don't need a server address, since your local disk is assumed to be the 'server'.

Relative URLs

Relative URLs (also called partial URLs) do not contain the complete information required for a browser to locate the file they refer to. For example, the scheme or network address could be missing.

Reasons to use a relative URL

Some of the advantages of using relative URLs over complete URLs are:

☐ Less typing is required to enter them.

☐ If you move all the files to a different location but keep the same folder hierarchy you don't have to revise the URLs.

☐ The same file referred to by a relative URL can be accessed by different schemes (for example both 'http' and 'ftp').

Base URLs

The browser has to figure out the missing information, based on the URL of the document that contains the relative URL (this is called the 'base URL'). The browser has to construct a complete URL by combining the relative URL with the relevant information from the base URL.

The base URL can come from one of two sources.

☐ If the current document contains a **BASE** element, then the URL specified in this element is used as the base URL for all relative URLs in the document. You should put a **BASE** element in your document if it contains relative URLs and you expect users to download the document to their local systems and browse it later.

☐ If there is no **BASE** element, the URL that the browser used to retrieve the current document will be the base URL.

Interpreting relative URLs

The following guidelines are slightly simplified and don't represent everything that can be said about interpreting relative URLs, but they cover the most frequently encountered cases. Remember that the process being described here is being done 'internally' by the browser when it's interpreting the relative URL: the browser doesn't actually modify the URLs in your document.

1. Relative URLs can start with one of the following:

    – A double-slash: '//'.

    – A single slash: '/'.

    – A file or folder name.

    – A dot '.'.

    – A double dot '..'.

2. If the relative URL starts with '//', then the only thing missing is the scheme (*http*, etc.). In this case the scheme is inherited from the base URL to make a complete URL.

3. If the relative URL starts with a single slash, then the scheme and the server address are missing. Both of these will be inherited from the base URL to make a complete URL. For example:

    ```
    /orwell/face.gif
    ```

    A file with this URL will be retrieved with the same scheme and from the same server as the document that contains the URL.

4. If the relative URL starts with a folder or filename, then the procedure that a browser will use to make a complete URL is to remove the filename from the base URL and then append the relative URL to it. For example, suppose the relative URL is:

    ```
    orwell/homage.htm
    ```

    and the base URL is:

    ```
    http://triptych.sq.com/authors/contents.htm
    ```

    The browser removes the filename from the base URL to get:

    ```
    http://triptych.sq.com/authors/
    ```

    Now the browser appends the relative URL to this to get the complete URL:

    ```
    http://triptych.sq.com/authors/orwell/homage.htm
    ```

5. A couple of special characters can occur in relative URLs:

    – A relative URL can start with the characters '..'. This means 'go up one folder level'.

    – The character '.' at the start of a relative URL means 'the current folder'.

    If the complete URL that you get by combining the base and relative URL contains the characters '/../', e.g.,

    ```
    http://triptych.sq.com/authors/../orwell/homage.htm
    ```

    then the browser interprets this by removing the folder that precedes those characters from the URL. The resulting URL from the last example would be:

    ```
    http://triptych.sq.com/orwell/homage.htm
    ```

The folder 'authors' has been removed. If the URL contains the characters '/./' then the browser will simply remove './' from the resulting URL.

These characters aren't interpreted as special characters unless they occur as the only thing between two slashes ('/../' or '/./'). For example, the sequence '/tom../' just refers to a folder called '*tom..*'.

Creating relative URLs with HoTMetaL PRO

If you're creating a relative URL with the H.*i*.P. Editor's Edit URL... command, leave the Scheme text box blank, and enter the required information in the Path text box. You can convert absolute to relative URLs throughout a document by using the Find and replace URLs... command in the Tools menu. (See the next page.)

The 'mailto' scheme

The *mailto* scheme is used:

- As the 'action' for a form that is to be e-mailed.
- In an anchor, which can be clicked on in a browser to generate a mail-editing dialog box.

Inside an A or FORM element, as appropriate:

- Choose the Edit URL... command in the Markup.
- In the Edit URL dialog box, choose the 'mailto' scheme.
- Enter the user name in the Path text box.
- Enter the domain name in the Host text box.
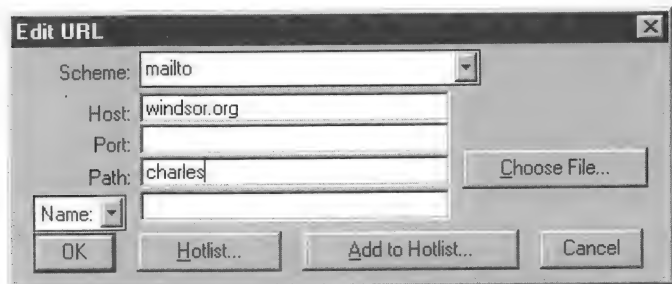
The resulting URL is:

```
mailto:charles@windsor.org
```

In a form, there is one more thing you have to do in order to use *mailto*:

- Choose **Element Attributes...** from the **Markup** menu.
- Set the **METHOD** attribute to the value ' POST'.

Some browsers do not support *mailto*. Also, in order for this feature to work if your system is behind a firewall, you may need to configure your browser to use the correct proxy server. See your system administrator and browser documentation if this is the case.

Displaying URLs

By default, the H.i.P. Editor displays the URLs associated with relevant elements in the prefix of the element's start-tag. If you want to hide the URLs, choose **Hide URLs** from the **View** menu: the URLs will disappear from the display, and the menu item will toggle to **Show URLs**. Clicking on **Show URLs** will cause the URLs to be displayed again. You can configure the H.i.P. Editor to show or hide URLs by default in the **Defaults for New/Open** section of the **Options** dialog box.

When the mouse cursor is over an element containing a URL, the URL is displayed in the message area in the lower left corner of the H.i.P. Editor window.

Changing your URLs for your intranet

Before a completed H.i.P. or HTML document is moved to an intranet server, all URLs should refer to documents that are available on the intranet server. (While the document is being created, they may refer to documents on your local system.)

For example, when you are creating a document the URLs may consist of local filenames such as:

```
file:///c||/rodney/orwell/homage.htm
```

When the document is placed on your server, you must substitute URLs that refer to documents that are available on your server or some other server. For example:

```
http://www.sq.com/orwell/homage.htm
```

The Find and replace URLs... command gives you the opportunity to edit all the URLs, modifying them if necessary. This command is a form of 'find and replace' for URLs.

When you choose Find and replace URLs... from the Tools menu, you will get a dialog box containing two text boxes.
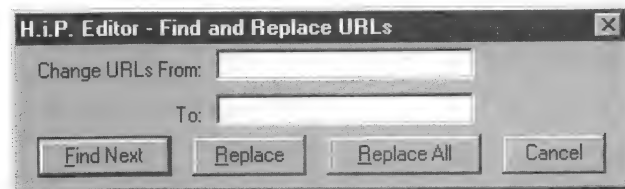
The first box (labeled Change URLs From) contains a part of the URL that you want to change; the second box (labeled To) contains the text that you want to change it to. You can enter text in these boxes to replace the default text.

If there were a large number of URLs for which you needed to change a local folder such as *file:///c\/rodney* to an intranet server address, such as *http://www.sq.com*, you could enter:

```
file:///c||/rodney
```

in the Change URLs From text box, and:

```
http://triptych.sq.com
```

in the To text box.

Finding and replacing URLs

When you click on the [Find Next] button, H.i.P. finds the next element that has a URL matching the **Change URLs From** text. The insertion point is placed inside that element, and the document scrolls to its location. The search starts at the insertion point or selection.

Clicking on the [Replace] button will change the text you're searching for to the text in the **To** box.

Clicking on the [Replace All] button will make this change for all URLs in the document that contain the **Change URLs From** text. This also dismisses the dialog box.

This form of 'find and replace' matches only starting at the first character of the URL.

Changing to relative URLs

You can change your URLs so that they are in relative rather than complete form. What this generally involves is deleting the first part of all URLs; that is, the scheme, the host, and perhaps part of the path. For example, if your current links were all of the form *file:///c\/rodney/ orwell/[file].htm* and you wanted to put them in a directory on the Web, it could be useful to put them in relative form, if all your files were in a 'flat' directory on your web site. In the **Change URLs From** text box, you would type *file:///c\/rodney/orwell*. You would not type anything in the **To** text box. The net effect of that publish operation would be to strip the scheme, host, and most of the path, and leave you with *[file].htm* for all your URLs. For more details on relative and complete URLs, see page 286.

Publish operations could also add './' and '../' to the beginnings of your URLs, change all URLs to a different sub-directory on the same site, etc.

For more information   See our 'Technical Reference' page (choose **Technical Reference** from the Help menu) for references to standards documents that define URLs.

Spell-checking and thesaurus

The H.*i*.P. Editor provides an HTML-aware spell-checker and thesaurus.

Using the spell checker

The **Check Spelling...** command in the **Edit** menu lets you spell-check all or part of the text of your document, using one or more dictionaries.

When you choose **Check Spelling...** or click on the [image] toolbar button, the H.*i*.P. Editor spell-checks your document, starting at the insertion point and continuing through the document, wrapping around to the top when the end of the document has been reached. If a word is found that has no entry in any of the dictionaries, a dialog box appears: the word is displayed at the bottom of the dialog box next to the label **Misspelled Word** and is also highlighted in the document window.

H.i.P. Editor - Check Spelling ☒

element
aliment
ailment
elemental
eliminate
allayment
elements
allemande
ilmenite
emollient
melanite
elementally
emanate
aliments
ailments

[Next]
[Replace]
[Add to Dictionary]
[Ignore]
☐ Restrict
[Set Restriction]
[Cancel]

Replace with: element

Misspelled word: elemeant
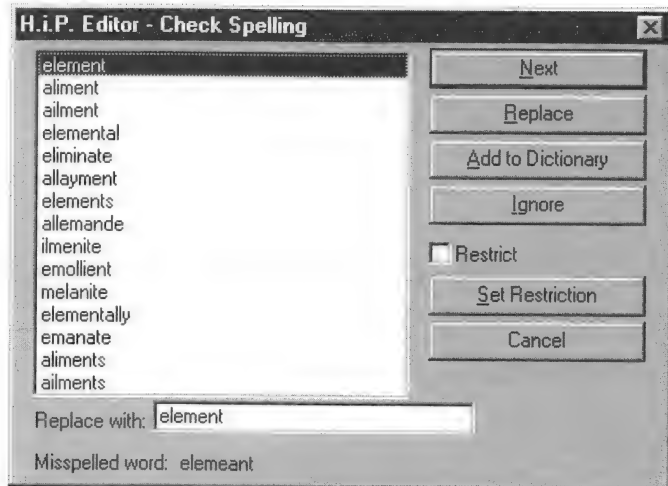
The list in the dialog box will present a number of possible substitutions: this list includes words whose spelling or pronunciation is close to the unrecognized word. The words are listed in decreasing order of probability that they are the correct substitution.

Correcting a misspelled word

If one of the words in the list is the correct substitute for the misspelled word, you can click on that word. The word you chose is then put in the text box labeled **Replace with**. You can also type replacement text of your choice in the text box directly. This text box initially contains the unrecognized word. When the text box contains the desired substitution, click on the [Replace] button to make the correction to the document and continue spell-checking.

Leaving a word as-is

If the unrecognized word is a word that you consider spelled correctly (perhaps it is a jargon word, a proprietary name, etc.) then you have several options.

☐ If you expect this word to appear again in this document or in other documents, you can add it to the user dictionary by clicking on the [Add to Dictionary] button. If there is no current user dictionary you will get a **Load Dictionary** dialog. Use this dialog as described in the section on editing dictionaries (page 299). After you load the dictionary, you will have to click on [Add to Dictionary] again to add the word to the user dictionary. The next time you spell-check with the same user dictionary, the spell checker will not stop at this word.

☐ If you want the unrecognized word to be ignored by **Check Spelling...** only for the duration of this the H.i.P. Editor session, click on the [Ignore] button. This causes the word to be put into a temporary list of correctly spelled words, and subsequent occurrences will be ignored. The next time the H.i.P. Editor is invoked with the same dictionaries, the spell checker will again stop at this word.

☐ If you do not want to take any special action, click on the [Next] button. This causes the search to resume; if the word occurs again in the document, the spell checker will stop at it.

The H.i.P. Editor informs you when no more misspelled words are found.

Restricting spell checking

You can restrict spell checking to a selection in your document. This must be done in two parts. First, define the restricted search area:

■ Highlight the portion of the document that you wish to restrict spell checking to.

■ Click on the [Set Restriction] button in the **Check Spelling** dialog box.

This causes the restricted search area to be defined. Even if you later highlight some other part of the document, the H.i.P. Editor will still know where the restricted area is. This process does not actually enable restricted spell checking. To do this, you must then:

■ Click in the check box labeled **Restrict**.

If it is checked, restricted spell checking is enabled.

Choosing the spell checking 'language'

The H.i.P. Editor can check for American English or British English spelling. The lexicon for each 'language' is contained in a *system dictionary* that is shipped with the H.i.P. Editor. System dictionaries cannot be edited.

The default is American English. To switch to British English, you must open the file *hipedit.ini* in the H.i.P. Editor folder with a text editor (e.g., Notepad). Find the line:

```
spell_checking_language=AMERICAN
```

Change it to:

```
spell_checking_language=BRITISH
```

Save the file.

You must also go to the **Spell Checking** section of the **Options** dialog and change the supplementary dictionary and user dictionary to their British counterparts:

- Click on the [Choose] button beside the **User dictionary** text box and select the file *user1b.dct* in the *lib\spell* folder under the H.i.P. Editor folder.

- Delete the supplementary dictionary listing for *hip1a.dct* by clicking on the [Delete] button.

- Add the supplementary dictionary listing for *hip1b.dct* by clicking on the [Add] button and selecting it from the *lib\spell* folder under the the H.i.P. Editor folder.

- Restart the H.i.P. Editor.

> **Note** By default, the British spelling dictionaries are not installed with the H.i.P. Editor. To install the British dictionaries, you have to do a custom install from the SoftQuad H.i.P. CD, and select the British dictionaries from the list of options. See the SoftQuad H.i.P. release notes for more information.

Normally there should be no reason to move the system dictionaries, but if you have to, you must indicate the new **System Dictionary Path** in the **Spell Checking** section of the **Options** dialog.

User dictionaries

You can create a personal *user dictionary* to which you can add your own list of words that do not appear in the system dictionary. This way you avoid having the spell checker stop at the same words over and over.

You can select a default user dictionary in the **Spell Checking** section of the **Options** dialog box. You can also choose the default dictionary file extension in this dialog box. You can load a different dictionary during a the H.i.P. Editor session, but only one user dictionary can be loaded at a time.

The default user dictionary is the file *user.dct*, located in the *lib\spell* folder in the H.i.P. Editor folder.

Creating or loading a dictionary

To create a new user dictionary or load an existing user dictionary:

- Choose **Edit Dictionary...** from the **Edit** menu.
- If no dictionary is currently loaded, you will get the **Load Dictionary** file chooser dialog box. If there is a dictionary already loaded, you'll get the **Edit Dictionary** dialog box. Click on the [Load Dictionary...] button to get the **Load Dictionary** dialog.
- In the **Load Dictionary** dialog box, choose the name of the dictionary you want to load. If you enter the name of a file that does not exist, the H.i.P. Editor will ask if you want to create a new dictionary.

Editing a user dictionary

User dictionaries are binary files and cannot be modified with a text editor. To edit a user dictionary:

- Create or load the user dictionary.
- Choose **Edit Dictionary...**.

the H.i.P. Editor brings up the **Edit Dictionary** dialog box. This dialog contains a list of words in the current user dictionary.

To add a word to the dictionary:

- Enter the word in the text box labeled **Word** and click on the [Add Word] button.

To delete a word from the dictionary:

- Click on that word in the list and then click on the [Delete Word] button.

You may prefer to add words to the user dictionary during a spell checking session.

Changes to the user dictionary will be saved automatically when you quit the H.i.P. Editor, save the current file, or switch dictionaries.

Supplementary dictionaries

You can specify as many as 24 *supplementary dictionaries*, which are generally lexicons of specialized terminology for a specific field such as medicine or law. The difference between supplementary dictionaries and the user dictionary is that supplementary dictionaries cannot be modified during a spell checking session unless you load one explicitly using **Edit Dictionary...**. Supplementary dictionaries are created and developed using **Edit Dictionary...**, just like user dictionaries.

You can enter the names of supplementary dictionaries that you want to use in the **Spell Checking** section of the **Options** dialog box.
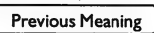
You then have to restart the H.i.P. Editor for this setting to take effect.

The H.i.P. Editor is shipped with a default supplementary dictionary, *hip.dct*, which contains a list of Internet-related terms.

Using the thesaurus

The H.i.P. Editor lets you look up words in an on-line thesaurus.

- In the document, highlight the word that you want to look up.
- Choose the **Thesaurus...** command in the **Edit** menu, or click on the [THE] toolbar button.

The document must contain a selected word when you choose the command. The selection will be displayed at the top of the **Thesaurus** dialog box; if the selection is a word in thesaurus, then the number of meanings for that word that thesaurus contains will be indicated, and the first meaning displayed. The buttons [Next Meaning] and [Previous Meaning] can be

used to display the different meanings. If thesaurus does not contain the selected word, the dialog box will give a message indicating this.

The dialog box contains a menu that is used to display lists of words that are somehow related to the selected word (with the meaning you have chosen).

The choices are:

☐ **Synonym** – gives words that have the same or almost the same meaning as the current selection

☐ **Antonym** – gives words that have the opposite or almost the opposite meaning to the current selection

☐ **Related** – gives words whose meanings are similar to the current selection, but not as close as synonyms

☐ **Contrasted** – gives words that oppose the current selection, though not as directly as antonyms

☐ **See Also** – gives words that describe ideas related to the current selection

If you want to replace the current selection with a word from one of these lists, click on the word from the list and then click on the ⎡ Replace ⎤ button. Alternately, you can type a word directly into the text box labeled **Replace with** and then click on the ⎡ Replace ⎤ button. Any word that you select from one of the lists is immediately inserted in this text box.

If you wish to invoke thesaurus with a new word from the document, highlight the desired word and click on the ⎡ Get Word ⎤ button.

The thesaurus is not editable.

Working with images

Images are represented in HTML documents by IMG elements. These elements have no content, but require a URL pointing to the image file. The most common image format on the Web is the GIF format; all Web browsers, with the exception of line-mode browsers, can display images in this format *inline*, in the document window. JPEG format is also very popular and is accepted by more and more browsers. The H.i.P. Editor can display graphics of many different formats, including BMP, PNG, JPEG, GIF, and others; however, not all browsers can. Your graphics should be in GIF or JPEG format if you want to display them on the Web. The H.i.P. Editor and its associated product, MetalWorks, can convert graphics between different formats and manipulate images (see page 321 on editing and converting images).

Files in other graphical formats are normally displayed by launching external applications. The H.i.P. Editor follows the same approach.

This chapter also gives information on creating clickable image maps.

Inserting images

You can insert an image in three ways:

- Dragging and dropping an image file into the H.*i*.P. Editor document window

- Clicking on the ▦ toolbar button.

- Inserting an **IMG** element using **Insert Element...** command in the **Markup** menu.

If you use the ▦ button or **Insert Element...**, the H.*i*.P. Editor inserts an **IMG** element and displays the **Image Attributes** dialog box.

Since the **IMG** element can't have any content, you won't be able to insert it if the document contains a selection.

Dragging and dropping

When you drop an image into the H.*i*.P. Editor window, the H.*i*.P. Editor normally inserts an **IMG** element that points to the image. You can configure the H.*i*.P. Editor to insert a dragged and dropped image file as either an **IMG** (image) or **A** (anchor) element. The H.*i*.P. Editor will recognize the extensions of certain specified image files. These two options can be set in the **General** section of the **Options** dialog. If you choose **Drop image as IMG element**, dragging and dropping an image with the extensions listed in the **Image Extensions** list will insert an IMG element with a relative path. You can add or delete image extensions from this dialog box.

When you drag and drop, an I-bar insertion element will follow your mouse cursor. If you attempt to create an image element where the rules will not let you, nothing will happen when you release the mouse button.

Editing image properties

The Image Attributes dialog box is used to edit the properties of an image. This dialog box appears when you insert an image from the toolbar. You can bring up this dialog three ways:

- Double-click on the image.
- Right-click inside the image element and choose Image Attributes from the pop-up menu.
- Click once on the image and choose Image Attributes... from the Tools menu.
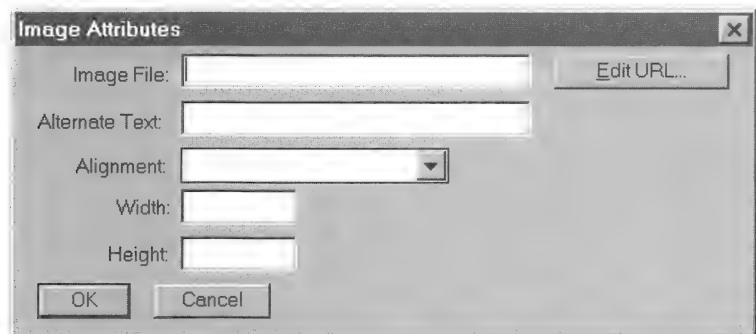
Image file

The Image File text box in this dialog box is for entering the URL for the image. This information is required. You can type the URL directly into the text box if you want, or click on the [Edit URL...] button. This will give you a dialog box called Edit IMG Source that is almost identical to the Edit URL dialog box (see page 279). The only difference is that it doesn't have the 'Name/Query' control group, as this information does not apply to images.

- Enter the URL. If you need more information on URLs, see the *Links* chapter (page 275).

Alternate text

The **Alternate Text** text box is for entering some text that will be displayed if the document is being read with a browser that can't display images or one that has image loading turned off. Even though this information is not required, it is good HTML style to include it for the benefit of users without graphical browsers.

Alignment

The default alignment for images is BOTTOM, meaning that the bottom of the image will be on the baseline of the adjacent text. You can also set the image alignment to the following:

☐ MIDDLE: aligns the baseline of the current line with the middle of the image.

☐ TOP: image aligns with the top of the tallest item in the line.

☐ LEFT: image 'floats' on the left margin and text wraps around it to the right.

☐ RIGHT: image 'floats' on the right margin and text wraps around it to the left.

☐ TEXTTOP: image aligns with the top of the tallest text in the line.

☐ BASELINE: same as BOTTOM.

☐ ABSMIDDLE: aligns the middle of the current line with the middle of the image.

☐ ABSBOTTOM: align the bottom of the image with the bottom of the current line.

Not all of these image alignments are supported in the same way by Netscape Navigator and Microsoft Internet Explorer. If you are creating H.i.P. documents for the H.i.P. Viewer on both platforms, make sure that your page looks acceptable in both browsers. LEFT and RIGHT alignment for images can also be set from the toolbar. (See page 215.) If you want to center an image, surround it with a block element (such as P) which you can then center-align.

Width and height

When you insert an image—by dragging and dropping or any other means—the H.i.P. Editor will automatically set the HEIGHT and WIDTH attributes of that IMG element for you. These attributes are measured in pixels; they tell the browser how large an image is. This will speed download times and page formatting. HEIGHT and WIDTH are not supported by all browsers, but do make a large difference to how fast a web page formats in many browsers. If you wish to change these attributes, you can edit them by bringing up the **Image Attributes** dialog box.

Displaying images in the H.i.P. Editor

If the URL of an IMG element refers to a GIF, JPEG, BMP, PNG, or TIFF file on your local system, the H.i.P. Editor will normally display it in place in your document.

In the **Defaults for New/Open** section of the **Options** dialog box, you can choose whether such images should be displayed in place or not. This choice will then apply by default to all new documents. You can override the **Options** setting for individual documents using **Show/Hide Inline Images** in the **View** menu. If you don't want images to be displayed in the document, choose **Hide Inline Images**. The command will then toggle to **Show Inline Images**: if you choose this command, the H.i.P. Editor will resume displaying inline images.

Image maps

Image maps (or *clickable image maps*) are images that have been divided into regions; clicking in a region in a browser causes an action to occur. There are two types of image maps: client-side and server-side. Both types of image maps require a list of the co-ordinates that define the mapping regions, and which URLs they are associated with. *Server-side* image maps require this list to be in a separate *map file*, which is associated with the image by a program running on a Web server. *Client-side* image maps include the co-ordinates and URLs in the HTML document itself, in an element called **MAP**, and are linked to the image by the Web browser.

> **Note** Most Web browsers support the use of server-side image maps, but client-side image maps are becoming increasingly common (both H.i.P. Viewer compatible browsers can use client-side image maps). Use both features with caution, and note that good HTML style involves giving clients who do not have access to image map features an alternate way of accessing different documents, such as a text-only list.

Server options

There are two different types of Web servers: NCSA and CERN, and they require slightly different server-side map file formats. You can set the format of the map file in the **General** section of the **Options** dialog box. Click on CERN or NCSA format; the map file will be saved appropriately when you create it with the H.i.P. Editor's image map editor.

Creating image maps

To create an image map file or a USEMAP (MAP element):

- Click on the image that the mapping file will apply to (if you have turned off the display of inline images, just put the insertion point inside the IMG element).
- Choose **Image Mappings...** from the **Tools** menu, or right-click inside the image and choose **Image Mappings...** from the pop-up menu that appears.

This launches the image map editor.

The image map editor

The image map editor displays the image and lets you define the regions in the image map file and match these regions with URLs.

> **Note** The mapping editor will not create or read MAP elements located in other HTML documents; a MAP element must be inside the current document to be used by the map editor.

This window doesn't have a menu bar; all actions are performed with the mouse pointer and the toolbar buttons.

The status bar at the bottom of the window gives the following information:

☐ If the mouse pointer is over a defined region, the first (leftmost) field in the status bar displays the URL associated with that region.

☐ The second field displays the coordinates of the current location of the mouse pointer, measured from the upper-left corner of the image. If the mouse pointer is outside the image, the coordinates of the closest point on the image border are displayed.

☐ The third field displays the current zoom (magnification) level.

☐ The fourth (rightmost) field displays the name of the map file.

If there was an existing image map file when you launched the image map editor, its regions will be displayed on top of the image.

The 'zooming' buttons let you work with greater or lesser levels of detail.

Creating new mapping regions

The types of regions you can create are rectangles, circles, polygons, and points. To create a region, you have to click on the appropriate toolbar-button and then define the region.

☐ Rectangle: click on the [▣] toolbar button, click (without releasing) on one corner of the rectangle you want, then drag the mouse and release it when the desired rectangle is outlined.

☐ Circle: click on the [◉] toolbar button, click (without releasing) on any point on the boundary of the circle you want, then drag the mouse and release it when the desired circle is outlined.

☐ Polygon (multi-sided region): click on the [△] toolbar button, then click and release the mouse at each vertex (corner) of the shape you want to define, to a maximum of 100 corners. When you've finished, click once with the right mouse button to complete the shape.

☐ Point: click on the [✛] toolbar button, then click on the desired point in the image.

Once you've created a region, you will get a dialog box that lets you enter the URL associated with that region. You can also enter a comment and, if you're creating a client-side (USEMAP) map, you can enter some alternate text.

The image map editor will stay in the same mode (rectangle, circle, polygon, or point) until you select another mode by clicking on a toolbar button.

Editing regions

Once a mapping region is created, it can be edited, moved, and resized.

- Click on the (pointer) toolbar button.
- Click on the region that you want to edit.

The region will be inverted and its rectangular 'bounding box' will become visible.

Moving and resizing regions

- ☐ To move any region, click and drag anywhere inside its bounding box.
- ☐ To resize a circle or rectangle, click and drag on any edge or corner of the bounding box. To resize a rectangle and keep its original proportions, hold down the (Shift) key and then click and drag.
- ☐ To move a vertex of a polygon, click on the vertex and drag it.

Changing URLs

To change the URL associated with a region:

- Click on the toolbar button.

And:

- Double-click on the region that you want to edit.

Or:

- Click on the region that you want to edit.
- Click on the toolbar button.

This gives you the dialog box in which to change the URL, comment, and alternate text associated with the region.

Viewing the map list

To see a 'map list' of all the regions and mappings, click on the ⊞ tool-bar icon. A map list dialog box appears.

Editing entries

- □ Clicking on an entry in this list will highlight the region in the image window.
- □ Double-clicking will bring up the dialog box for editing the URL.
- □ To delete a region, click on the entry and then click on the [Delete] button.

Setting the default URL

Image maps typically contain a default entry, the URL that is accessed if the user clicks on a location that has no URL mapped to it. To enter a default URL, click on the [Add Default...] button and enter the desired URL.

Ordering the regions

If regions overlap, those that appear first in the map list take precedence over those that follow. You can change the order by clicking on an entry in the map list and dragging it to the desired location. The map list will be rearranged appropriately.

Saving the image map file

When you've finished defining all the regions and mappings, click on the [OK] button. You will then see a dialog box in which to choose the type(s) of mapping that you want: 'server-side' (ISMAP) or 'client-side' (USEMAP). Remember that an image can have either or both.

Both **IsMap** and **UseMap** are checked by default. For an ISMAP, enter the name and path of the (new or existing) mapping file that you want to use in the **IsMap Name** text box or click on the [Browse...] button and select it in the file chooser dialog box that appears.

For a USEMAP, enter a map name in the **UseMap Name** text box. (This name will become the value of **MAP** element's **NAME** attribute.) the H.i.P. Editor will provide a default name. You should choose a different name for each **MAP** in the document. The mapping program will warn you if you try to create two **MAP** elements with the same name.

- Click on [OK] .

If you chose **IsMap**, the H.i.P. Editor will save the mappings in the file you specified. If you chose **UseMap**, the H.i.P. Editor will insert an appropriate **MAP** element in your document.

Server side image maps: 'Anchoring' the image map file to your image

If you create a map file with the H.i.P. Editor, an **A** element will be created around the image. This anchor associates the map file with the GIF image that you want to display. You are generally going to be creating a map file on your PC, and you will have to upload the file to your service provider so that it works on the Web. The following instructions apply to setting the URL of the anchor which surrounds the image so that it points to the map file on the server.

In order to understand what's going on here you have to know that there is a program called *imagemap* on the server, which reads your image map file whenever someone clicks on the image. The browser sends the program the coordinates of the point that was clicked on. The *imagemap* program determines which *region* in the image was clicked on, and on the basis of this, tells the server which URL to access.

You use a URL to associate the image map file with your image. This URL tells the server two things:

☐ The location (server address and folder) of the program *imagemap*.

☐ The symbolic name for your image map file.

A typical location for the *imagemap* program is the *cgi-bin* folder on the server. In this case, the URL (in an A element) would look something like this:

    http://triptych.sq.com/cgi-bin/imagemap/brundlefly

(Here 'brundlefly' may look like a filename, but it's actually the symbolic name of the image map file).

You will have to edit the URL of the anchor that has been created, so that it points to the correct position on the server.

- Use **Edit URL...** in the **Markup** menu to change the URL of the A element to a value such as the one in the example.

- Change the URL of the IMG to point to the location of the GIF image on the intranet server. (This is usually done by changing all the URLs in the document at once with the **Find and replace URLs...** command— see page 290 for more details on publishing documents).

The image you created with the H.i.P. Editor mapping program will have its ISMAP attribute set. This tells the server that the image that this element points to is an image map.

Server-side image maps: informing the server

Not all intranet servers deal with image maps in exactly the same way. For this reason, the instructions given here *may not work* for your server. The following discussion is based on the UNIX NCSA *httpd* server; with the exception of the instructions in the following two paragraphs, the instructions here should apply to all servers. You should consult your server's documentation or a knowledgeable person if you're unsure whether something applies to your situation.

Once you've created the image map file, you need to tell the server where it is. If you're using the UNIX NCSA *httpd* server, you would do this by making an entry in the file *imagemap.conf* in the *conf* folder on the server. (You'll have to find out from a local administrator where the server folder is located.) If you're using a different server, the filenames given in this section may not be correct: you should consult the server documentation or talk to an administrator.

The *imagemap.conf* file consists of entries that associate a *symbolic name* with every image map file known to your server. One line describes each map. You can choose whatever symbolic name you wish to use. In this example, the symbolic name is *brundlefly*, and the image map file is in */home/rodney/public_html/heads.map*. You should put the following

line in the *imagemap.conf* file:

```
brundlefly:        /home/rodney/public_html/heads.map
```

If someone else is administering the server, you may not be able to update this file yourself. You'll still have to choose a symbolic name for your image map file, because this name is used in the next step.

Testing your image map

To see if what you did worked:

- Choose **Preview...** from the **File** menu.
- In the browser, click in each of the regions you defined to make sure that the 'right thing' happens.

All the files must be on the server and you must have an Internet connection active in order for this to be successful.

How client-side image maps work

All of the links for a client-side image map are specified within an HTML document. Client-side image maps are generally faster than server-side image maps because the browser does the work, not the server.

Associating an IMG with a MAP

In order for the browser to know which **MAP** to use for a particular image, the **USEMAP** attribute of the **IMG** element must point to that **MAP**. The value of this attribute must be a URL that refers to the **MAP** element for this image map. In the H.i.P. Editor mapping editor, the **MAP** element must be in the current document, and the mapping editor will set this for you.

The URL will start with a '#' character, followed immediately (no spaces) by the *name* of the **MAP** element (that is, the value of the **MAP**'s **NAME** attribute).

It is possible to create and reference **MAP** elements in other documents; in this case, the URL must be edited manually. The '#' and the name of the map would be immediately preceded by the other document's URL. For convenience, the **MAP** element is often placed directly after the **IMG** element for the image map. The **MAP** is not displayed in the browser window.

MAP has one attribute, called **NAME**. The value of this attribute is the map name, a string of characters that is used to identify the **MAP**, so that an **IMG** element can refer to it.

The MAP element contains one or more AREA elements, each of which defines a region in the image map. An AREA has the same function as a line in an image map file. AREA doesn't have any content: all of the information is contained in its attributes.

You can use both the standard ('server-side' or ISMAP) image map processing and a 'client-side' (USEMAP) MAP for the same image. If the browser viewing the file supports client-side image maps, then this method of processing the image will be used. If the browser does not support client-side image maps, then it will refer to an image map file on the server.

Extensions to images

The IMG element has been extended to use certain other attributes. To edit any of these attributes, right-click and choose **Image Attributes...** from the pop-up menu, choose **Element Attributes...** from the **Markup** menu, or type (F6) at the keyboard.

Some browsers support the image attributes BORDER, VSPACE and HSPACE.

☐ BORDER: sets the border around the image in pixels. This can be set to '0', which creates a borderless image, often useful when making 'hot images'.

☐ Specify blank space on the top and bottom (VSPACE) and on the sides (HSPACE) of an image. The value is in pixels.

Internet Explorer supports the following attributes of IMG for playing video files:

☐ DYNSRC – lets you specify the URL of a video clip or VRML file. If the file is displayed in a browser that does not support this feature, the image referred to by the SRC attribute will be displayed.

☐ START – this attribute specifies when the video file will be played. The value FILEOPEN causes this to happen as soon as the HTML document is opened; the value MOUSEOVER causes the video to be played when the mouse cursor is over the animation. If you supply both values, the video will be played in both situations.

☐ CONTROLS – If this attribute has the value CONTROLS, a set of controls will be displayed under the video.

□ LOOP – specifies how many times the video should be played. The value '-1' or INFINITE will cause it to be played 'infinitely'.

□ LOOPDELAY – the wait time between plays (in thousandths of a second).

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Thumbnail catalogs

The H.i.P. Editor lets you maintain a database of image *thumbnail catalogs*. A catalog consists of a group of reduced-size representations of images; it lets you easily scan the images and access the image files.

To open the thumbnail database:
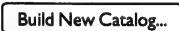
■ Choose **View Image Thumbnails...** from the **Tools** menu.

This brings up the MetalWorks image editor in *thumbnail mode*. (See page 321 for information on using this editor to edit images.)

The first time you choose this command, you will automatically get a dialog box in which to create a new thumbnail catalog; if you have already created at least one thumbnail catalog, then when MetalWorks is launched it will display a dialog box in which to open a thumbnail catalog.

Creating a catalog

To create a catalog:

■ Choose **Display Thumbnails...** in the MetalWorks **File** menu.

■ In the **Display Thumbnails** dialog box, click on the [Build New Catalog...] button.

You will get a dialog box in which to enter a name for the new catalog, and choose the folder that the images will come from.

■ Enter a **Catalog Name** in the text box. (This is meant to be a descriptive name, not a file name.)

■ Navigate to the folder that you want the images to come from.

■ Click on the [Open] button.

If there are any images in the folder that are not already in the database (that is, they aren't in any catalog) you will get a dialog box asking if you want to add them.

When the catalog has been created, it will be displayed on the screen.

Viewing a catalog

To view an existing thumbnail catalog:

- Choose **Display Thumbnails...** in the MetalWorks **File** menu.
- Select a catalog from the list that is displayed.
- Click on the ⌷ OK ⌷ button.

Deleting a catalog

To delete a catalog:

- Choose **Thumbnail Database...** in the MetalWorks **Options** menu.
- Select a catalog from the list that is displayed.
- Click on the ⌷ Delete Catalog ⌷ button.

Using the catalog

From a thumbnail catalog, you can:

- ☐ Double-click on a thumbnail to open the image in the image editor.
- ☐ Drag and drop an image into the H.i.P. Editor.
- ☐ Rename an image (on the disk) by selecting the image and choosing **Rename...** from the **File** menu.
- ☐ Delete an image by selecting it and choosing **Delete...** from the **File** menu. This deletes the image *from the disk*.
- ☐ Select an image and choose **Information...** from the **View** menu to display the image format information.
- ☐ Print the catalog (1 to 6 images per page).

Editing images

You can view and edit images that are included in a document in the H.*i*.P. Editor.

- Click on the image and then choose **Edit...** or or **View...** from the **Tools** menu.

Or:

- Right-click on the image, and from the pop-up menu that appears, choose **View** or **Edit**.

The **Options...** command lets you configure which editor and viewer programs that are launched from the pop-up menu (see the next section). If you have not chosen an image editor or viewer, a **Choose Image Editor/ Viewer** dialog box will appear.

An image editor/viewer called *MetalWorks* is shipped with the H.*i*.P. Editor, and is described starting on page 321.

Choosing the editor and viewer

To select image viewers and editors:

- Choose Options... from the Special menu and open the Helper Apps section.
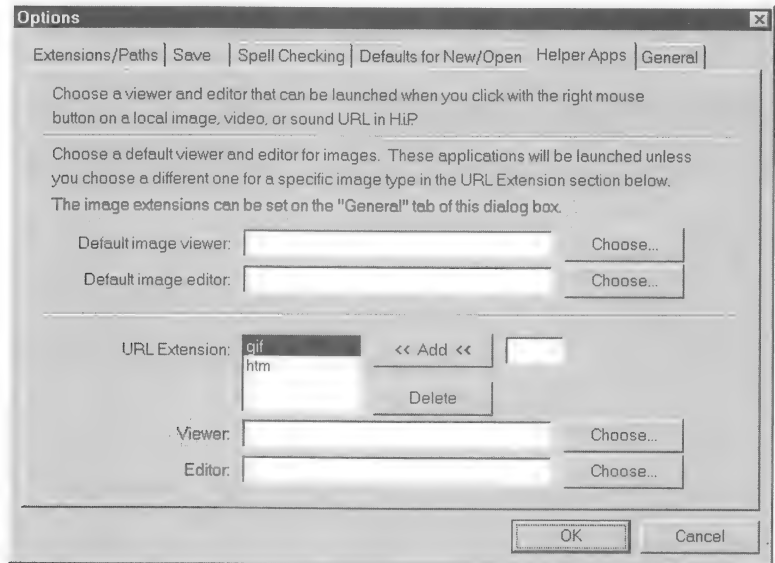
This dialog box lets you choose a default viewer and editor, and also choose viewers and editors for specific image types.

To choose the defaults, enter the full path of the applications in the **Default image viewer** and **Default image editor** text boxes. If you wish, you can use the [Choose...] buttons to navigate to and choose the applications.

To choose the viewer and editor for a specific image type:

- Enter the file extension for a particular image format in the text box to the *right* of the [<<Add <<] button. For example, if all of your JPEG images have the *.jpg* file extension, enter 'jpg' in the text box
- Choose a viewer by entering the full path of the viewer program into the **Viewer** text box. Click on the [Choose...] button if you want to locate the viewer with a file chooser.
- Similarly, choose an **Editor**.

- Click on the [<< Add <<] button.

This adds the file extension to the **URL Extension** list and confirms your viewer and editor choices.

To delete an extension from the list, just select that extension and click on the [Delete] button.

If you want to change the editor or viewer associated with an extension, you have to delete the extension and then enter both choices again.

When you've made all the additions or changes, click on the **Options** dialog's [OK] button.

Introduction to the MetalWorks image editor	The MetalWorks editor is shipped with the H.*i*.P. Editor, and is the default application for editing and viewing images from the H.*i*.P. Editor. The MetalWorks executable file is *mtlwks1.exe*, located in the H.*i*.P. folder.

MetalWorks has commands for manipulating existing images and for creating certain kinds of new images, but it is not a fully-featured image editor; for example, it does not have drawing commands.

Some available features are:

- Filters: invert, sharpness, equalizing, noise removal, swapping red and blue
- Effects: embossing, borders, buttonizing, transparency
- Adding text to images
- Area manipulation; resizing; rotation
- Color adjustment and reduction
- Saving in different formats
- Zooming.
- Encoding and decoding images.

Status bar

A status bar appears at the bottom of the MetalWorks window. When at menu item or toolbar button is selected, the status bar displays a help prompt for it.

When you're in image editing mode, the status bar displays the cursor coordinates, the zoom level, file format, color count, compression, and file size.

Undo

The **Undo** command in the **Edit** menu provides one level of undo. An undoable action consists of one iterative procedure and includes area manipulation, cut/paste, color/size change, mirroring, rotating, and filtering.

Zooming

To zoom in or out on an image, select a zoom command from the **View** menu or click on the appropriate toolbar button. The **View** menu also contains commands for fitting the entire image in the window, fitting the width of the image in the window, and unzooming. To zoom on an area, define an area and then choose **Zoom In** from the **View** menu.

Printing

To print the image, choose **Print...** from the **File** menu or click on the toolbar button. MetalWorks fits the image to the page when printing.

You can enter a margin value in inches to define the amount of spacing between the image and the edge of the page.

If an area is defined, you can print just the area by choosing the **Selection** option in the print dialog.

Toolbar

You can show or hide the MetalWorks toolbar by choosing **Show/Hide Toolbar** from the **Window** menu.

Preferences

- Choose **Preferences...** from the **Options** menu.
- **Image Display:** if you are using an under 24-bit display, you can choose **Fast** to cause images to load faster, but with an inferior appearance, or **Best** to cause images to load fully-dithered, which takes longer.
- **Thumbnail display:** choose **Custom** and enter a number to specify how many images are displayed per line in thumbnail mode. **Auto** allows the application to choose the best fit.

The remainder of this chapter discusses the MetalWorks editor in more detail.

Opening an image

To open an existing image:

- Choose **Open...** in the **File** menu, or click on the ▨ toolbar button.
- Use the **List Files** drop-down list to select a filter extension.
- Navigate and select the file you want to open.

Creating a new image

You can create three types of images:

- ☐ A solid colored rectangle
- ☐ A button bar (grid of buttons)
- ☐ A new image consisting of an image pasted from the clipboard

To create an image:

- Choose **New** from the **File** menu.

The **New** dialog box is displayed.

- Choose the image type by clicking on the appropriate radio button.
- Choose the image size. You can choose from a set of standard sizes, or choose 'custom' and enter the height and width that you want.
- Choose a color.

- If you are creating a button bar, choose the number of rows and columns that you want, and the button depth (the width of the border that creates the three-dimensional effect).

- Click on [View] to preview or [OK] to accept the image.

Displaying file information

To display a dialog box containing information about the current image, choose **Information...** from the **View** menu or click on the [i] toolbar button.

The dialog box displays the file name, size, and modification date, graphics format, compression method, width and height, aspect ratio (height to width ratio), color type, and number of color shades (color depth).

Changing the image format

You can use MetalWorks' **Save As** command to change the image's name, format, and options. MetalWorks will auto-detect the format and color content of an image and default to the appropriate settings, but you can override these defaults manually.

- Select an image format (GIF, JPEG, PNG, etc.) from the **List Files** drop-down list.
- Click on the [Options...] button to set options such as color depth and compression.
- Click on [OK] to save the image.

Color depth

Color depth is the number of bits that can be used to define each color: in effect, color depth refers to the number of different colors that can appear in the image. The greater the number of possible colors, the larger the file will be. You can also use this option to specify the number of greys that can appear in the image. Different image formats support different color depth options.

If you choose a color depth that allows fewer colors than are currently allowed in the image, you must also select a color reduction method: dithering or matching. In general, choose dithering if there are a large number of colors, and matching if there are a small number. See *Color Reduction* (page 327) for more information.

Compression

Some file formats support different compression methods or no compression at all. Possible options include RLE, LZW, Packbits, Group 3, Group 4, CCITT, JPEG, and Deflate.

JPEG Options

If you are saving the image in JPEG format, you have available a number of special options.

☐ *Quality (Q factor)*: when a JPEG image is compressed, some information is lost (this is feature of JPEG is known as 'lossiness'). The Q factor can be set from 25 to 100 and determines the amount of lossiness. The lower the value, the greater the compression and image loss. A Q Factor of 100 would produce a near lossless image but almost no compression.

☐ *Photograph*, *Line Art*: these options are also related to compression. The **Photograph** option improves compression but can often produce undesired results and blurring in images that contain sharp edges and high color contrasts. Select the **Line Art** option for such images.

Progressive display

When images that use this option are displayed in a browser, they are first displayed in a low resolution, followed by a display of the complete image. This option is available only for the GIF, JPEG, and PNG image formats. This functionality is often referred to as *interlacing*.

Area manipulation

To select an area, click (without releasing) on a corner of the area that you want to select, and and drag until the desired area is outlined. Then release the mouse button.

To move a selected area, move the mouse pointer anywhere inside the area, so that the pointer changes to a four-headed arrow. Then click and drag, and release the mouse button when the area is in the desired location. The status bar indicates the change in position as the outline is moved.

To resize a selected area, click (without releasing) on any edge or corner of the area's outline and drag the outline to the desired size. To preserve the original proportions when you resize, hold down the (Shift) key while you're dragging. The status bar indicates the change in scale as the outline is moved.

To duplicate a selected area and move it anywhere on the canvas:

- Choose **Duplicate** in the **Area** menu (if it isn't checked already).
- Proceed as you would if you were just moving the area.

Choose **Rotate 90** in the **Area** menu to rotate the selected area by 90 degrees.

Choose **Rotate** in the **Image** menu to rotate the selected area by 90, 180, or 270 degrees.

Choose **Crop** to cut everything but the selection.

You can cut, copy, paste, and clear a selected area. When you paste, the contents of the clipboard are presented in the upper-left corner of the window. You can then drag it to the desired location.

Color adjusting

To modify the brightness, contrast, or gamma of an image:

- Choose **Color Adjust...** from the **Image** menu or click on the [icon] tool-bar button.
- Drag the appropriate slider(s) to the desired value.
- Choose red, green, blue, or 'all' from the the **Channel** pull-down to apply the adjustment to the desired color component.

Click on [View] to preview, or [OK] to accept the changes.

Color reduction

To reduce the number of colors in an image:

- Choose **Color Reduce...** from the **Image** menu or click on the [icon] toolbar button.
- Choose the number of colors. You can select one of the preset color options, or select **Custom Color** or **Custom Grey** and then enter the number of colors you want.
- Choose a color reduction method: dithering or matching (see the next section for more information on these).
- Click on [Preview] to preview, or [OK] to accept the changes.

Dithering and matching

Dithering produces the highest quality color reduction by using combinations of colors and patterns to represent various colors. Matching selects the closest color value and reduces the image appropriately.

Images with a high color content (such as photographs) will reduce best with the dithering method. However, dithered images do not compress well. Images with a low color content (such as clip art) will reduce best with a matching method and produce maximum compression.

Rotating and mirroring

To rotate an image by 90, 180, or 270 degrees, click on the ⊞ toolbar button (or choose **Orientation...** from the **Image** menu) and select the desired rotation.

To mirror (flip) an image horizontally (left to right), choose **Mirror Y** from the **Image** menu. To mirror (flip) an image vertically (top to bottom), choose **Mirror X** from the **Image** menu.

Resizing

To resize an image:

- Choose **Resize...** from the **Image** menu or click on the ⊞ toolbar button.
- Choose a size. You can choose:
    - One of the preset sizes.
    - **Custom-Proportional**: then enter a width or height (in pixels) and the other value will be set proportional to the one you entered.
    - **Custom**: then enter a height and width (in pixels) of your choice.

Size increases will eventually blur any image. Maintain the original aspect ratio to produce the best results.

Adding text

To add text to an image, choose **Add Text** from the **Effects** menu or click on the ⊞ toolbar button. This turns on text mode. Place the text cursor anywhere on the image and begin entering text from the keyboard. To turn off text mode, choose **Add Text** again or click on the ⊞ toolbar button.

Formatting text

To select the format of the text that you're going to add, choose **Text Options...** from the **Effects** menu.

You can choose:

- The font, font size, font style, and font color.
- Text orientation: **Horizontal** (normal), **Vertical Up** (type upward), and **Vertical Down** (type downward).
- Text justification (left, center, right).

Anti-aliasing

Choose **Anti-aliasing** from the **Text** menu to perform text anti-aliasing.

Anti-aliasing provides a smoother edge on text, eliminating the jagged appearance. However, this introduces new colors to an image and may increase the size of the image.

Image filters

A number of filtering methods can be applied to an image or selected area.

Invert

When importing image files from a variety of sources it is possible to run across an image that has been inverted. This is often true of monochrome files. To invert an image or selected area, choose **Invert** from the **Image** menu.

Sharpness

To modify the sharpness of an image or selected area, choose **Sharpness** from the **Image** menu. Increase or decrease the sharpness using the slider. Click on [View] to preview, and [OK] to accept the changes.

Equalize

When an image or selected area is too dark or too light, and cannot be adequately adjusted using the brightness control, you should try the equalizing filter. This filter adjusts the colors so that the luminosity is uniform throughout the image or selected area. To equalize an image or selected area, choose **Equalize** from the **Image** menu.

Removing noise

Often a file comes from a source that has introduced noise to the image. For example, a video grab may include small white pixels (snow) or a fax file might contain a number of small black pixels. The **Remove Noise** filter can help clean up such images.

This filter evaluates every pixel in an image or selected area, samples the surrounding pixel values, determines a median color value, and compares the original pixel value to that median. If the difference is greater than the defined threshold value, the pixel is replaced by the median color value. Threshold values can be defined from 1 to 128. The lower the threshold, the more pixel replacement. A value between 32-64 is recommended for effective noise reduction.

To remove noise from an image or selected area, choose **Remove Noise** from the **Image** menu. Choose a threshold using the slider. Click on $\boxed{\text{View}}$ to preview, and $\boxed{\text{OK}}$ to accept the changes.

Swap Red & Blue

When importing image files from a variety of sources it is possible to run across an image that has the red and blue pixels swapped. This is often true of Sun Raster files. To swap the red and blue pixels of an image or selected area, choose **Swap Red & Blue** from the **Image** menu.

Effects

A number of effects can be applied to an image or selected area to change and enhance it.

Embossing

Embossing makes the image look like it was carved into a surface. To apply this effect to an image or selected area, choose **Emboss** from the **Effects** menu. You can adjust the effect by choosing a 'light angle' using the slider. This simulates light striking the embossed surface from a specified angle. Click on ⸢ Preview ⸥ to preview, and ⸢ OK ⸥ to accept the changes.

Border

To apply a border to an image:

- Choose **Border...** from the **Effects** menu.
- Choose the **Basic Border Type.**
- Choose the width of the border (in pixels) using the slider.
- Select the desired border color.
- Click on ⸢ Preview ⸥ to preview, and ⸢ OK ⸥ to accept the changes.

You can repeat this operation several times to add extra borders.

Buttonizing

You can cause the image or selected area to appear stamped on a button:

- Choose **Border** from the **Effects** menu.
- Choose the border width (in pixels) using the slider.
- Choose the border color. If you choose **None,** then instead of being drawn outside the image, the border will be inside the image and will take its colors from the boundary of the image.
- Choose the button type: **Raised Button** will create a 3D effect; **Inverted Button** will create a 'pushed button' effect.
- Click on ⸢ View ⸥ to preview, and ⸢ OK ⸥ to accept the changes.

You can repeat this operation several times to add extra buttonizing effects.

Transparency

You can define a transparent color for GIF and PNG images. When these images are displayed in a browser, the pixels that are normally displayed in that color will adopt the color of the browser background. The desired effect is an image that blends into the browser window and does not appear to have a rectangular boundary.

- Choose **Transparency** from the **Effects** menu.
- Select the color to be made transparent by clicking on that color in the image window, or by using the sliders. If the image already has a transparent color, you can remove it by clicking on the [Remove] button.
- Click on [Preview] to preview, and [OK] to accept the changes.

The transparent color will then be displayed with a gray cross-hatched fill pattern.

Encoding and decoding

The image editor can encode and decode graphics files. You may wish to encode a file, if, for example, you want to send it in a text-format mail message.

To encode a file, choose **Encode...** from the **File** menu. This gives you a dialog box in which to select the file and encoding type. You can encode files in 'UUencode' or 'XXencode' format. Furthermore, you can specify singe-file or multi-part encoding.

To decode an encoded file in 'UUencode' or 'XXencode' format, choose **Decode...** from the **File** menu and select the file to be decoded.

Tables

The H.i.P. Editor provides a convenient table editor to graphically edit tables. Tables are often used for formatting effects. For example, a table with one row and two cells filled with text side by side could be used to create the effect of two columns on a H.i.P. page. Similarly, names of items and text describing an item can be put side by side. Please use table effects with caution, as not all Web browsers support all features of the current table model. There should always be text-based alternatives to complex table formatting, and uncommon table attributes (such as background color) should be used with caution.

Inserting a table

You can insert a table by clicking on the ▦ toolbar button or by choosing the Insert Table... command in the Tools menu.

This gives you a dialog box that lets you specify many different table options:
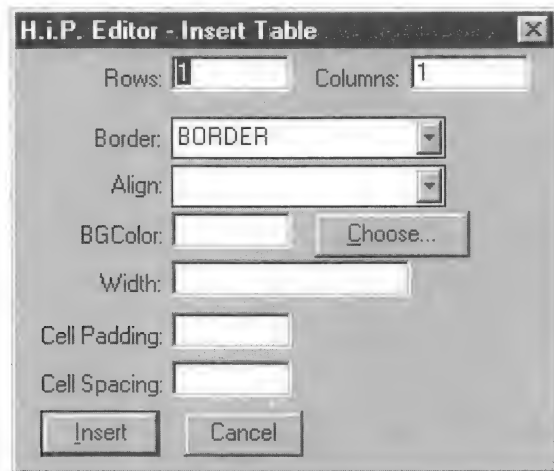
The $\boxed{\text{Insert}}$ button in this dialog box will be grayed-out if it is invalid to insert a table at the current insertion point.

☐ **Rows** and **Columns**: the number of row and columns in the table.

☐ **Border**: the lines that form the boundary of each table cell when the file is displayed in a browser. You can choose a numerical value, which specifies the border in pixels, or 'BORDER' (causing the browser to draw the default border). You can choose your selection from a drop down list or enter it manually in the text box provided. The table border corresponds to the BORDER attribute of the TABLE element. Note that some browsers do not draw borders around empty table cells.

☐ **Align**: tables can have left, right, or center alignment. You can make your choice from the drop-down list. Table alignment corresponds to the ALIGN attribute of the TABLE element. Not all Web browsers support this feature, so use it with caution.

☐ **BGColor**: Some browsers let you set the background color of a table. Click on $\boxed{\text{Choose...}}$ to bring up the standard Windows color chooser. The color you select will be expressed as a hexadecimal red-green-blue value. You can also enter this value directly in the text box, or you can enter one of the standard Windows color names (but note

that these are currently supported only by Microsoft Internet Explorer). The color of the background of the table will change in the H.i.P. Editor window to reflect your background choice. The background color corresponds to the BGCOLOR attribute of the TABLE element.

> **Note** Use caution when setting background colors in tables. Older browsers (e.g., Netscape 2.x) may have difficulty interpreting the BGCOLOR attribute in a table. This sometimes results in the browser displaying the table as white text on a white background, or other unusual behavior.

☐ Width: you can specify the table width as an absolute number of pixels or a percentage of the document width. The width corresponds to the WIDTH attribute of the TABLE element. You can set the width for table cells as well—see page 337.

☐ You can specify the Cell padding (space between the cell border and the text) and Cell spacing (space between cells) in pixels. These correspond to the TABLE element's CELLPADDING and CELLSPACING attributes, respectively.

All of the properties described above can be set for an *existing* table by putting the insertion point inside the table and choosing Table Properties... from the Tools menu.

There are several other less common table properties that can be set by editing the attributes of the table. Place the insertion point to the right TABLE> start-tag and choose Element Attributes... from the Markup menu. The attributes you can change are:

☐ NOWRAP: text will not wrap in table cells if this feature is turned on. This can create some very large table cells that scroll off the Web browser's window, so use this feature with caution.

☐ BORDERCOLOR, BORDERCOLORLIGHT, BORDERCOLORDARK: set the color of the border, or, for 3D-style borders, set two different colors for the 'light' and 'dark' areas of the border. Not all browsers support these attributes.

☐ VALIGN: sets the vertical alignment of all cells in the table to TOP, MIDDLE, or BOTTOM.

☐ HEIGHT: sets the height of the table in pixels or in percentage of the document height.

All tables in the H.i.P. Editor will be the same width as the document window.

Properties

The properties described in this section will affect how the table is displayed in a browser, depending on the browser's capabilities.

The Cell Properties... command in the Tools menu lets you set properties for an individual cell.
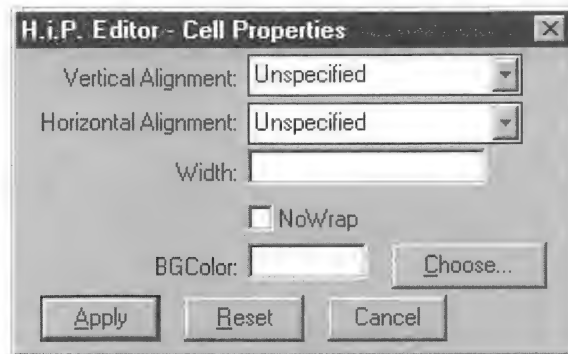
The Row Properties... command in the Tools menu lets you set properties for an entire row.
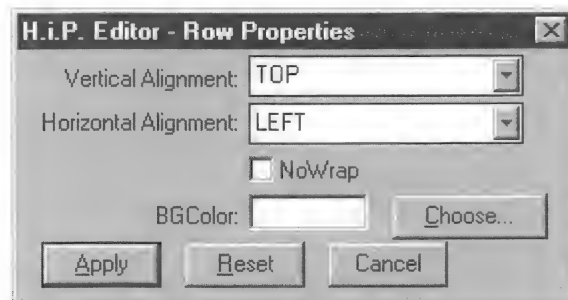
Vertical alignment

The vertical alignment specifies whether a cell's content is aligned with the top, middle, or bottom of the cell. Vertical alignment can be set for a particular cell or row: a setting for a cell takes precedence over a row setting. To set the vertical alignment:

- Put the insertion point inside the cell or row whose vertical alignment you want to set.
- Choose **Cell Properties...** or **Row Properties...** as appropriate.
- Make a choice from the **Vertical Alignment** drop-down list.
- Click on the [Apply] button.

Horizontal alignment

Horizontal alignment (justification) specifies how the text in a table cell is aligned with the sides of the cell. Your choices are *left*, *right*, *centered*, and *justify* (that is, aligned on both sides). Horizontal alignment can be set for a particular cell or row: a setting for a cell takes precedence over a row setting. To set the vertical alignment:

- Put the insertion point inside the cell or row whose horizontal alignment you want to set.
- Choose **Cell Properties...** or **Row Properties...** from the **Tools** menu, as appropriate.
- Make a choice from the **Horizontal Alignment** drop-down list box.
- Click on the [Apply] button.

Column/cell width

By default, when a column is displayed in a browser its width will be adjusted to the longest piece of text in any cell in the column. To set the width of a cell explicitly (this sets it for the whole column containing the cell):

- Put the insertion point inside the cell whose width you want to set.
- Choose **Cell Properties....**
- Enter a value in the **Width** text box.
- Click on the [Apply] button.

The value you should enter for the width depends on what the browser expects. Netscape Navigator currently interprets a value that you enter as a number of (screen) pixels. Other browsers may interpret the width value differently, or even ignore it. An alternative is to use cell spanning (page 340) instead: for example, a cell that spans over two cells will be displayed twice as wide as a normal cell.

If more than one cell in a column has a width setting, the longest one is used.

The width setting does not affect how the table is displayed by the H.i.P. Editor.

Wrapping

By default, the content of a cell will *wrap* when it is displayed in the browser, that is, it will be displayed over several lines rather than one long line. If you want wrapping turned off for the current row or cell:

- Put the insertion point inside the cell you want to modify.
- Choose **Cell Properties...** or **Row Properties...** from the **Tools** menu, as appropriate..
- Turn on the **NoWrap** check box.
- Click on the [Apply] button.

To turn wrapping off for the current row: Some browsers may ignore these settings.

Background color

You can set the background color of a table row or cell. This feature is not supported by all browsers. To change the background color of a table row or cell:

- Put the insertion point inside the cell you want to modify.
- Choose **Cell Properties...** or **Row Properties...** from the **Tools** menu, as appropriate.
- Click on the [Choose...] button next to the **BGColor** text box.
- Choose a color from the standard Windows color chooser that appears.
- Click on the [Apply] button.

You may also enter the color manually in the text box provided, as a hexadecimal red-green-blue value, or as one of the standard Windows color names.

The color of the background in the table cell or row will change in the H.i.P. Editor to reflect your choice of color.

Adding and deleting rows and columns

You can add or delete a single row or column using the Edit Table... command in the Tools menu.

When you select Edit Table... you will get a palette containing several buttons.

The six buttons along the bottom of the palette carry out the following operations:

- □ : create a new row above the current row.

- □ : create a new row below the current row.

- □ : delete the current row.

- □ : create a new column to the right of the current column.

- □ : create a new column to the left of the current column.

- □ : delete the current column.

If you insert a row or column, it adopts the defaults of the current row or column. You cannot delete a column if it has one or more cells that span an adjoining column; similarly, you cannot delete a row if has one or more cells that span an adjoining row. If you still want to perform the deletion, you will have to contract the spanning cells (see the next section, *Spanning table cells*).

Spanning table cells

The Edit Table... command in the Tools menu lets you change the spanning of the cell containing the insertion point.

Eight icons at the top of the palette extend and contract cells.

Extending cells

Extending a cell is like 'knocking out the wall' between cells. The cell-extending icons, in clockwise order from the top, are:

□ : extends the top boundary of the cell one cell up.

□ : extends the right boundary of the cell one cell to the right.

□ : extends the bottom boundary of the cell one cell down.

□ : extends the left boundary of the cell one cell to the left.

There are some rules about extending cells:

- The cell being extended into must be empty.
- The boundary that is being removed must be the same length or height as the cell being extended into. For example, a cell that spans one row cannot extend into an adjacent cell that spans three rows.
- You cannot extend *vertically* into a cell that has already been extended vertically, or extend *horizontally* into a cell that has already been extended horizontally.
- You should avoid extending *every* cell in a row up or down. This will collapse the row into the adjacent row so that only one row is visible, even though two rows are actually present in the table markup.

Contracting cells

The cell-contracting icons, in clockwise order from the top, are:

- ☐ **⊡** : pulls the top boundary of the cell one cell down.

- ☐ **⊡** : pulls the right boundary of the cell one cell to the left.

- ☐ **⊡** : pulls the bottom boundary of the cell one cell up.

- ☐ **⊡** : pulls the left boundary of the cell one cell to the right.

Other table features

Table caption

To give a table a caption:

- Put the insertion point just to the right of the (TABLE⟩ start-tag.
- Choose **Insert Element...** from the **Markup** menu, or type ⟨ Ctrl-I ⟩ .
- Insert a CAPTION element.

Table header

Table cells are represented by the TD element. Cells can be changed to TH (table header) elements by putting the insertion point in the appropriate cells and choosing the **Change Element...** command from the **Markup** menu. If you simply wish to bold the text, we suggest that you insert a **B** or STRONG element inside the table cell(s) instead of changing the table cell element.

Reformatting tables

Sometimes tables that were *not* created with the H.*i*.P. Editor's graphical table editor will not display well in the H.*i*.P. Editor. Here are some things you can try to improve the appearance:

☐ If the content of a cell is particularly long it may appear cramped because the cell width does not expand. One solution is to extend cells to the left or right to make a wider cell. If this is not convenient (perhaps the adjacent cells already have data in them) you can create a new column adjoining the current column, and then extend the current cell into the new column. This will create a wider cell. You may want to extend all the cells in the current column in this way.

☐ If you insert an element inside a table cell and all or part of the tag icon is invisible, it may be that you need to use the **Format Editor Display...** command in the **View** menu to set the 'space above' to o for this element.

☐ Note that tables must be rectangular. Opening a file with a non-rectangular table with the H.*i*.P. Editor could cause problems. You should try filling in the missing cells and then opening the file again.

☐ If you can't find any other way of improving the table format, you should consider re-creating the table, this time using the H.*i*.P. Editor's table-editing commands.

Display styles

SoftQuad H.*i*.P. lets you define three kinds of styles:

1. Local display formatting styles, described in this chapter, provide screen-formatting capabilities that help you edit documents by allowing you to assign distinctive styles to the elements in your document. *The purpose of these formatting features is to mimic the way a browser will format your document, and improve the appearance of your document during the editing process. The styles that you set with the* **Format Editor Display...** *command do not affect how browsers format the document.* Several display styles files corresponding to browser styles are provided.

2. HTML styles, i.e., the formatting that HTML browsers give to various HTML elements (e.g., you can use the **FONT** element to specify font size and color). Some hints on using HTML to specify styles are given in this chapter—mainly for contrast with local display styles—but you should refer to the chapters *Core HTML* and *Extensions to HTML* for more complete information.

3. Cascading style sheets. These provide the most versatile control over document styles. The H.*i*.P. CSS Editor can be launched from the H.*i*.P. Editor (from the **Styles** tab of the **Properties** dialog in the **File** menu), or the H.*i*.P. Information Manager. See page 89 for more complete documentation on cascading style sheets and the H.*i*.P. CSS Editor.

Editor display files

The H.*i*.P. Editor stores the formatting information set with the **Format Editor Display...** command in a *binary* editor display file called *hip.stl*. Whenever a document is saved, this display file is updated with whatever styles are in effect for the document by default. You can also select or create a different display file in a non-binary format.

Editor display files in text form

The H.*i*.P. Editor can also load display files in text form. Text format display files have an *.asf* file extension. To create a text-format display file containing the styles in effect for the current document, choose **Save Editor Display...** in the **View** menu. To load a text-format display file, choose **Load Editor Display...** in the **View** menu. You can switch display styles in the middle of a the H.*i*.P. Editor session by loading a new text-format display file with this command.

> **Note** The formatting information from a text-format display file will not be saved in the default (binary) display file until the current document is saved.

Options for Editor display styles

The H.*i*.P. Editor searches for the display styles file in a set of folders called the *display path*. By default this path consists of the *Display* folder located in the H.*i*.P. Editor folder. You can modify the display path in the **Extensions/Paths** section of the **Options** dialog box. Choose a folder in the **Display** line. If you want just one folder in the display path, you can click on the [Choose] button and choose it. If you want more than one path, type them into the text box, separated by semi-colons (;). the H.*i*.P. Editor searches through the folders in the order in which they are entered, and uses the first display file called *hip.stl* that it finds.

The display path also becomes the the default folder for the **Save Editor Display...** and **Load Editor Display...** dialog boxes. If you choose a file extension, it becomes the default extension for these dialogs.

Useful Editor display files

The H.i.P. Editor has several preformatted display files (in text format) to choose from. Included are the following display styles files, which you can load from the *Display* folder:

☐ *hip.asf*: the default display file.

☐ *iexplore.asf*: mimics the default display style of Microsoft's Web browser, Internet Explorer.

☐ *netscape.asf*: mimics the default display style of the Netscape Navigator 2.0 Web browser.

☐ *showall.asf*: shows almost all attributes. This is a useful display file for 'power users' who want to see all attributes on screen.

☐ *colorize.asf*: a colorful display file, in which almost every element has a different color.

To achieve a near-WYSIWYG effect in the H.i.P. Editor document window, load one of these display files and then choose the following commands (if they aren't in effect already) from the View menu: Hide Tags, Hide URLs, Hide Comments, Hide Invisibles, and Show Inline Images.

Overview

All local screen-formatting is set using the Format Editor Display... command in the View menu.

Because HTML files are structured documents, setting a display style for an element means setting it for all elements of that type.

The following display styles can be set:

☐ *Font properties*: font, font size, font style (page 349).

☐ *Paragraph styles*: alignment, line height, and fill mode (page 350). (Fill mode determines how [Return] and [Enter] are treated—in *fill mode*, they cause the element to be split, but in *no fill mode* they cause a line break.)

☐ *Space before and after*: you can add space to the top and bottom of elements in order to set them off from surrounding elements (page 352).

- *Indention*: you can choose right, left, and first indents for elements. By choosing the right and left indent, you can set the line length for the element (page 352).

- *Color*: You can choose the foreground (text) and background colors for an element (page 353).

In addition, every element has a *format type*: *block* or *inline*. Block elements start and end on a separate line from adjacent content. Inline elements are not set off from adjacent text. All of the display styles listed above can be applied to block elements; only font properties and color can be applied to inline elements.

You can change the format assigned to an element in the document at any time. When you choose the **Format Editor Display...** command, the H.i.P. Editor gives you a dialog box allowing you to set formatting parameters for the current element (the one the insertion point or selection is in). If the insertion point is outside the HTML element that surrounds the entire document, the dialog box lets you set the default format. If you move the insertion point to a different element while the **Display** dialog box is on the screen, the dialog box changes to reflect the formatting of the new element.

The Display dialog box will look like the following illustration:
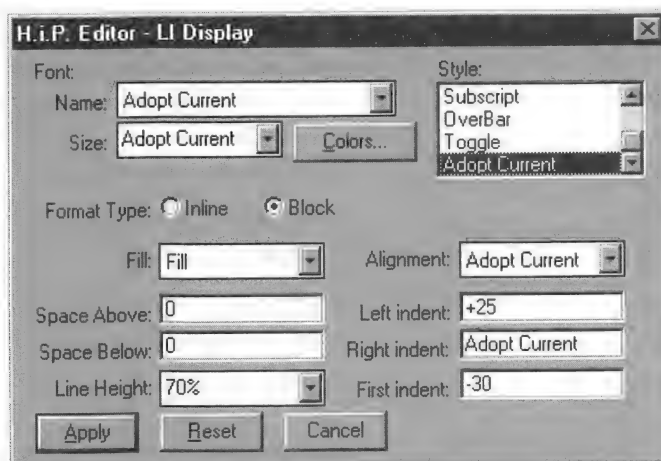
The element name (LI in this example) is displayed in the dialog's title bar.

Numerical values

The Display dialog box lets you enter numerical values for font size, line height, space above and below, and indention. These may be set from a menu or entered directly in a text box. As appropriate, these values may be *absolute*, *relative* (+/-), or expressed as a *percentage* of a base value. The following units may be used:

– centimeters

– inches

– machine units (1/16 point)

– millimeters

– picas (1/6 inch)

– pixels (same as points)

– points (1/72 inch)

You can use any unit wherever you are allowed to enter values. For example, font size may be expressed in points, inches, picas, etc.

Units can be specified by giving the full unit name, or the first few letters of the unit name, as long as that is unambiguous (e.g., don't use 'p' since that could mean 'points' or 'picas'). In addition, 'cm' and 'mm' specify centimeters and millimeters, respectively.

If you don't specify a unit, the H.i.P. Editor will interpret the value as points by default.

Examples

The following are examples of valid settings:
- 1 inches
- 1.45 i
- 2 mm
- 2 milli
- 3 pix
- 6 points
- 2 po
- 2 pica
- 2pica

Notice that you don't need any space between the number and the unit.

Relative and percentage settings

Relative settings specify an amount to be added to or subtracted from a base setting: they have the same format as absolute settings, but start with a '+' or '-' sign. As well, you may set a value to be **Adopt Current**, which means that the value is to be inherited from the surrounding element. Some valid settings are:
- -2.67 inches
- +3 picas
- Adopt Current
- ac (same as Adopt Current)
- +0 (same as Adopt Current)

Percentage values are specified with a percent (%) sign, the word 'percent', or a suitable abbreviation, e.g.:

- 100%
- 150 percent
- 243 per

Editor display font properties

You can choose the font used for the current element type from the drop-down list labeled **Name** in the **Display** dialog. If you want the current element to inherit the font of the element that surrounds it, choose **Adopt Current**. Use the **Style** list (see the next page) to add style variations (bold, italic, etc.).

The font you choose here will affect the H.i.P. Editor display only. If you want to choose a font in a way that will affect how your document is displayed in a browser, see page 236.

Editor display font size

To select the font size, click on the **Size** drop-down list and choose any size (including **Adopt Current**) shown. You can also enter a size in the text box to the left of the arrow. This size can be an absolute or relative value. If the size you chose is unavailable, the H.i.P. Editor will choose the next smallest font size. Relative values (+2 points, -3 points, etc.) are added to the font size of the surrounding element.

This setting affects the H.i.P. Editor display only. To change the font size used in a browser, use the **FONT** (page 214) or **BASEFONT** (page 215) element.

Editor display font style

The choices in the **Style** list allow you to add style variations to the font. These can be set individually or in any combination. To choose an option, just click on it. If an option is already chosen, you can choose additional options by pressing the ⌨Ctrl key while clicking on the options you want. To select a contiguous range of options, select the first option in the range, and then press the ⌨Shift key while clicking on the last option in the range.

Adopt Current means that the font style options of the containing element are adopted in addition to those explicitly set for this element type. If **Adopt Current** is the only option selected, then the font style for an element of this type will be identical to the font style of its containing element.

If you select the **Toggle** font style, the other style settings are *turned off* in the *current* element if they are *turned on* in the *containing* element. For example, an element whose font style is set to **Bold** and **Toggle** will appear as bold text within plain (Roman) surrounding text and as plain within bold surrounding text.

This setting affects the H.i.P. Editor display only. To change the font style in a browser, surround the text with one of the 'emphasis' elements, such as **EM**, **STRONG**, **B**, and **I**. Some browsers may support the **S** or **STRIKE** (strike-through), **SUB** (subscript), **SUP** (superscript), and **U** (underline) elements.

Paragraph display styles

These display styles determine how lines are formatted and are available only for block elements.

Alignment

The H.i.P. Editor offers four display styles of text alignment (also called *justification*)—left, right, centered, and 'both' (that is, both left and right alignment). If you choose **Adopt Current**, the alignment style is inherited from the surrounding element. Choose the style you want from the drop-down list labeled **Alignment** in the **Display** dialog box.

These settings affect the H.i.P. Editor display only. See page 215 for information on aligning elements in a browser.

Fill

This group of choices lets you specify how the H.i.P. Editor should treat 'return' characters for the current element type. If you type ⌷Return⌷ or ⌷Enter⌷ in an element formatted in **Fill** mode, the element will be split (see page 265). When **No Fill** is selected, the element will not be split when you type ⌷Return⌷ or ⌷Enter⌷.

Browsers typically display elements (with the exception of PRE) in fill mode.

The **Show Invisibles** command in the **View** menu (see page 354) will show you the location of 'new line' characters.

These settings affect the H.i.P. Editor display only.

Line height

You can select single, double, or triple spacing from the drop-down list labeled **Line Height** in the **Display** dialog box. A value may also be entered directly in the text box to the left of the arrow.

A percentage line height is interpreted as a percentage of single spacing. For example, 100 percent is the same as single spacing, 150 percent is 1.5 times as high as single spacing, and so on.

If you give a relative (+/-) value, the line height will be equal to the single-spaced line height, plus or minus the amount specified.

An absolute line height should be at least as large as the point size: otherwise, the lines will overlap. A value of about 1.2 times the point size would be normal.

If you select **Adopt Current** for the line height, then the element you are formatting will assume the absolute line height of its surrounding element. This could give undesirable results if the line height of the surrounding element is smaller than the font size of the current element.

These settings affect the H.i.P. Editor display only.

Space above and below

Space above and below control the vertical separation between elements. They are available only for block elements.

Space Above determines the minimum amount of vertical white space that must precede the current element. If the element before this one has a **Space Below** value, the actual separation will be the *greater* of the space above the current element and the space below the preceding element.

Space Below determines the minimum amount of vertical white space that must follow the element. The actual separation is the greater of the current element's bottom space and the next element's top space.

A space above or below can be specified as a percentage of one line height for the current element. For example, if you want 1 1/2 lines of white space between paragraphs, set the space above to 150%.

If you specify an absolute amount, it will be added to the normal line spacing.

These settings affect the H.i.P. Editor display only.

Indention

The *left indent* is measured from the left margin of the document window; the *right indent* is measured from the right margin of the document window. The two indents effectively specify the line length for the element.

If you specify a relative (+/-) left or right indent it is added to or subtracted from the corresponding indent of the element that contains the current element. For example, a value of '+1 inches' for the left indent causes the indent to be one inch to the right of the left indent for the containing element. An indent of **Adopt Current** is equal to the corresponding indent of the containing element.

The *first indent* (indent for the first line) can be different from the indent for subsequent lines: this is often done for paragraphs. An absolute first indent will be measured from the left margin. A relative first indent will be added to or subtracted from the left indent for the current element. A first indent of **Adopt Current** is identical to the left indent.

These settings affect the H.i.P. Editor display only.

Color

For each element type, you can choose a foreground color and a background color. The foreground color is the color of the text.

To choose the colors for an element, click on the [Colors...] button in the **Display** dialog box.

The H.i.P. Editor displays a dialog box containing two scrollable lists from which colors can be chosen, one for the background, one for the foreground.
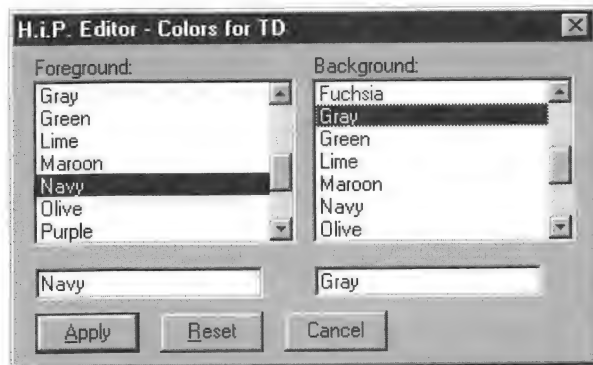
These lists contain the colors that are currently loaded into the H.i.P. Editor. In addition, the lists contain entries **Adopt Current**, **Default Background**, and **Default Foreground**. To choose a color, click on the color in the list or type it in the text box directly. Then click on the [Apply] button.

If you choose **Adopt Current**, the color of the surrounding element will be adopted for the current element. Note that if you choose **Adopt Current** for either the foreground or background color, then the other one will revert to **Adopt Current** also. You can, however, use **Default Background** or **Default Foreground** in conjunction with another color choice.

These settings affect the H.i.P. Editor display only. To change the color that a browser uses, choose **Document Colors...** (to change the default color), or surround the specific text you want to change and click on the toolbar button.

Adding colors

All of the available colors have an entry in the color map file, which is the file *rgb.txt* in the H.*i*.P. Editor folder. This file associates each color name with three numbers that specify the mixture of primary colors that makes up the color. The entries in the color map file are in the form:

```
213 144 5 shoreslop
```

The three values range between 0 and 256 and indicate the red, green, and blue values, respectively. The values are dependent on the video card installed for your display. The sample entry above will cause the name 'shoreslop' to appear in the foreground and background lists in the **Colors** dialog box.

To make more colors available to the H.*i*.P. Editor, edit the color map file with a text editor and add entries like the one in the example above. Two applications you can use to determine the red-green-blue values for a color are:

☐ PC Paintbrush (choose its **Edit Colors...** command).

☐ The Custom Color Selector, available through the Color control panel.

Invisible characters

Choose **Show Invisibles** in the **View** menu to see characters that would otherwise be invisible. A carriage return is represented by a 'paragraph' symbol; a new line by a 'sunburst' or 'currency' symbol; a space by a raised dot; a tab by a hash (number) sign, '#'; and a zero-width character by a tilde, '~'.

Choose **Hide Invisibles** to turn off the display of invisible characters.

General display options

The **Options...** command in the **Special** menu lets you set the following default display options. These settings affect the H.*i*.P. Editor display only.

- ☐ Icon appearance: you can select the font (typeface), font size (type size), and text and background color of tags in the **General** section of the **Options** dialog box.

- ☐ Default font: you can select the default font and font size for text using the **Defaults for New/Open** section of the **Options** dialog box. This setting takes effect on start-up only.

- ☐ **Size text to window:** if you turn on this option, which is found in the **General** section of the **Options** dialog box, wrapped lines will adjust their length to fit the window if the window is resized. If this option is turned off, wrapped lines will take their length from the global margins. **Size text to window** will cause a lot of reformatting, which may be slow for large documents.

Searching and replacing

The Find and Replace... command in the Edit menu allows text, elements, and patterns to be found and replaced.

When you choose this command you will see a dialog box, like the one illustrated below, that lets you enter various values or choose them from a pull-down menu.
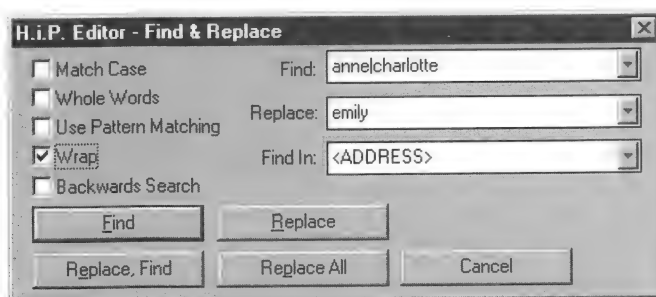
The search and replace operations represented by the buttons at the bottom of the dialog box generally work the way they do in other word-processing applications. Note the following, however:

☐ Text searches will not match if a part of the search text is found in a separate element. If you are searching for 'Fred and Barney', but the word 'and' is in a separate element (EM, for example), the search text will not be matched.

□ A replacement will not be carried out if it will cause the document to be incorrectly marked up (and rules checking is on). If such a replacement is encountered in a 'replace all' operation, it will be skipped over.

□ Choosing the Undo command after a 'replace all' will undo *all* of the replacements.

Choose Find Next to repeat a search using the most recent search text.

Specifying the search and replace text

The Find box lets you specify *search text* consisting of text characters, elements, or patterns. You can type the text in the box, or click on the down arrow to choose an element to search for. If the document contains a selection when you choose Find and Replace... the selected text will automatically become the search text. If the selected text is longer than 255 characters, it will be truncated. If the selection contains an element it will be truncated at the last character before the start-tag icon.

The Replace box lets you specify *replace text* consisting of text characters, elements, or patterns with which you want to replace the search text. As with the Find box, you can enter your replacement text or select a replacement element from the pull-down list.

The Find In box lets you restrict your search to a particular element by choosing it from the pull-down list.

The Find, Replace, and Find In text is described in more detail below.

Search options

There are five search options that you can set. You may want to search forward or backward through the file, match only whole words, match upper- and lower-case exactly, employ wrapping, or perform pattern searching. These options can be used in combination.

☐ **Whole words:** turning on **Whole Words** means that the search will match a sequence of one or more *whole words* only. For example, if you search for 'red' with **Whole Words** turned on, the H.i.P. Editor will not find it in 'Fred'.

☐ **Match case:** when case sensitivity is turned on, the H.i.P. Editor will look for the search text exactly as you've typed it—matching upper case to upper case and lower to lower. With case sensitivity off, the search will find any variation: the search text 'alice' would match 'ALICE', 'alice' and 'AliCE'. This option applies to patterns as well as text.

☐ **Backwards Search:** indicates that you want the search to move from the insertion point (or the start of the selection) back to the top of the file.

☐ **Wrap:** when **Wrap** is turned on, the H.i.P. Editor will wrap around the top or bottom of the file, depending on whether you are doing a forward or backward search.

☐ **Use Pattern Matching:** this option lets you turn on or off the H.i.P. Editor's ability to find patterns. If **Find Patterns** is turned off, any special search characters that you type in the search or replace text will be treated as ordinary characters. See *Using search patterns* (page 362) for more information on patterns.

Searching for elements

The search and replace text can both consist of an element. An open angle bracket, '<', followed by a valid element name matches an element. The angle bracket must be the first thing on the line. If the search succeeds, the insertion point is positioned to the right of the start tag. The name in the search text can optionally be followed by a closing angle bracket (>). You can select the element names in the **Find/Replace/Find In** fields from a pull-down list.

For example,

    <P

matches the element P. Element names are not case sensitive in the H.i.P. Editor, so '<p' and '<P' will match the same elements.

In a replacement, if the search text and the replace text are both elements, the element in the search text will be changed to the type specified in the replace text, if the HTML rules allow it. The contents of the element will be unchanged.

If the search text matches text (as opposed to an element) and the replace text is an element, the element will be inserted after the found text if the replacement operation is carried out.

Searching for text within an element

The search text can contain both an element name and, following it, some text (or a pattern) that must be matched within the element. In this case the element name must end with a closing angle bracket. For example:

    <P>the

would match the word 'the' anywhere within the element P. This is similar to the kind of restrictive searching that can be done using the **Find In** text but it can be used in conjunction with that feature to further restrict the search. In the last example, if the **Find In** text (see the next page) is set to:

    <OL

the word 'the' would be matched if it appeared in a paragraph in an OL list but not if it appeared in a paragraph in another context.

An element name in the replace text cannot be followed by text: if it is, an error message will be displayed and the replace operation will not be performed.

Attributes

You can restrict the search to an element with specific attribute values. This is done in the search text by following the element name with a space-separated list consisting of attribute names followed by an equal sign, '=', followed by a value contained in double quotes (" "). For example:

```
<a name="donkey"
```

will search only for those A elements whose NAME attribute has the value 'donkey'.

You can specify replacement attribute values in the replace text. For example, you could use the following replace text in conjunction with the find text in the previous example:

```
<a name="burro"
```

Any attribute values that aren't specified in the replace text will remain unchanged.

Search patterns (the next page) can be used to specify attribute values. You can specify as many attributes as you wish, and in any order.

Find In

One of the H.i.P. Editor's more powerful search features is its ability to restrict a search to the contents of a particular element type. For example, you could search for a word only when it appears in an EM element.

Use the Find In text box to specify the element that you want to restrict searching to. Specify the element in the same way you would in the search text, except that the element name can't be followed by text. Attribute values may also be specified in the Find In text—you can use Find In text such as:

```
<a name="donkeys"
```

Error messages

If you have badly-formed search or replace text, the H.*i*.P. Editor will display an error dialog box giving a description of the error. Errors that will be reported include: invalid attribute or element names; unmatched parentheses and brackets in search patterns; '?', '*', or '+' not preceded by any character; invalid character ranges.

For example, if you use the search pattern:

```
<QUAGMIRE
```

you will get the error message:

```
Find: Invalid element name
```

because the HTML rules do not allow an element called QUAGMIRE.

Using search patterns

If the Find Patterns option is turned on (see page 359), the characters you type in the Find text box are interpreted as *patterns* by the H.*i*.P. Editor: that is, the search text can contain certain special search characters that allow the search text to match a class of text strings, or markup constructs. (If your search text does not contain any special search characters, the H.*i*.P. Editor will search for exactly the text you have typed.) For example, the search character '.' (period) is used in the following pattern:

```
m...y
```

This matches a sequence of five characters beginning with 'm' and ending with 'y', e.g., the words 'money', 'marry', 'murky', etc.

The following characters are special search characters in a search pattern:

```
. * ? + ^ $ [ ]
```

In addition, the character '<' (used to specify an element search) is special when it appears as the *first* character of the pattern.

To search for any special character as an ordinary character when Find Patterns is turned on, precede it with a backslash. For example:

```
\.
```

is used to match a period.

Search patterns may be enclosed within parentheses for grouping.

Matching a single character

Any single character (other than a special character) matches itself in a search pattern. To match a single, *arbitrary* character, use a period or dot, '.'. This will also match a single blank space. Therefore:

```
fo.d
```

would match 'food', 'ford', 'fond', 'fold', etc. Similarly,

```
s.o.
```

matches 'stop', 'shot', 'snow', etc.

Matching zero or more of something

A single character, or text enclosed in parentheses, followed by an asterisk, '*', matches zero or more occurrences of that character or text. For example:

```
l*ama
```

would match 'ama', 'lama', 'llama', 'lllama', etc.

```
b(an)*a
```

would match 'ba', 'bana', 'banana', and so on.

You can combine the '*' with '.' to match arbitrary text. So:

```
s.*ch
```

matches 'search', 'such', 'stretch', 'stopwatch', as well as 'sch' and 'skip lunch'. This search pattern represents text that starts with 's' followed by zero or more occurrences of an arbitrary single character (it doesn't have to be the same character over and over) followed by the characters 'ch'. Since the period can match a blank space, this pattern can match a multi-word piece of text.

Matching one or more of something

A single character, or text enclosed in parentheses, followed by a plus sign, '+', matches one or more occurrences of that character or text. For example, the following expression matches 'ben', 'been', 'beeen', and so forth, but not 'bn'.

```
be+n
```

Matching zero or one of something

A single character, or text enclosed in parentheses, followed by a question mark, '?', matches zero or one occurrences of that character or text. For example, to search for instances of both 'color' and 'colour', you would use:

```
colou?r
```

Either/or searches

If you want to search for either of two search patterns, separate them with a vertical bar, '|'. This will match any text that matches either of the patterns. For example, if you wanted to search for either 'love' or 'money', you would use the expression:

```
love|money
```

You can combine two search patterns:

```
s.*ch|fo.d
```

Matching just after a tag

A caret, '^', at the very beginning of a search pattern means that text will match the pattern only if it immediately follows a start- or end-tag. Such text must not be separated from the tag by white space. Anywhere else, the caret is not treated as a special search character (except in character ranges, see below). For example, if you wanted to search for the word 'Note' immediately following a tag, you would use:

```
^Note
```

Matching just before a tag

A dollar sign, '$', at the very end of a search pattern means that text will match the pattern only if it is immediately followed by a tag. The text must not be separated from the tag by white space. Anywhere else, the dollar sign is not treated as a special search character. For example, if you wanted to search for the word 'sub' immediately preceding a tag, you would use:

```
sub$
```

Character ranges

A pair of square brackets, '[' and ']', around any group of characters defines a range that matches any *one* of the characters between the brackets. The simplest case is of this type:

`an[dy]`

This matches 'and' and 'any'.

A range of characters of the form

`[char1-char2]`

matches any character beginning at *char1* and ending at *char2*. For example:

`[e-p]`

matches any lowercase letter between 'e' and 'p', inclusive. The pattern:

`[A-Za-z]`

matches any upper or lower case letter.

`[A-Za-z0-9]`

matches any alphanumeric character.

A range of characters can be embedded in a longer range. For example, the pattern:

`[ac-fh]`

matches any of 'a', 'c' through 'f', and 'h'.

If searching is not in case-sensitive mode, no distinction between lower case and upper case letters is made in character ranges. In this situation, for example, the character range:

`[a-z]`

would match any upper- or lower-case letter.

You can reverse the meaning of a character range by preceding it with a caret, '^': this causes it to match any character *not* in the range. For example:

`th[^ei]n`

matches 'than' but not 'then' or 'thin'. An expression of the form:

`[^char1-char2]`

matches any character *not* in the range of characters beginning at *char1* and ending at *char2*.

Re-using the search text

If you surround a sub-expression in the search text by parentheses, '(' and ')', you can refer in the replace text to whatever this sub-expression matches. In general, an expression in the replace text of the form '\n', where *n* is a number from 1 to 9, means 'replace this expression with whatever the *n*th expression in brackets in the search text has matched'. For example, if the search text is:

```
(.)read
```

and the replace text is:

```
\1ox
```

then if the search text matches 'bread', the found text will be replaced by 'box'. This is because the sub-expression '(.)' matched the letter 'b'; the expression '\1' in the replace text means 'replace this expression with whatever is matched by the *first* expression in parentheses in the search text'. Therefore 'b' is substituted for '\1' and the replace text becomes 'box'.

Here is a more complicated example: suppose the search text is:

```
(v.*e)
(v.*a)
```

and the replace text is:

```
\2 \1
```

Now the search text may match the words 'vice versa'. The first sub-expression, '(v.*e)', matches 'vice' and the second sub-expression, '(v.*a)', matches 'versa'. In the replace text, the H.i.P. Editor replaces '\2' by what the second sub-expression in the search text matched, and replaces '\1' by what the first sub-expression matched. Therefore the replace text becomes 'versa vice'. The net effect of the operation is to replace an occurrence of 'vice versa' with 'versa vice'.

It is possible to nest sub-expressions. In this situation, the sub-expressions are numbered according to the order of occurrence of their left parentheses. For example, if the search text were:

```
(a(bc)d)
```

and the replace text:

```
\2 \1
```

the effect would be to find 'abcd' and replace it by 'bc abcd'.

The expression '\0' in the replace text refers to the entire text that was matched by the search text. For example, if the search text were:

```
fish
```

and the replace text were:

```
gone \0ing
```

then an occurrence of 'fish' would be replaced by 'gone fishing'.

You can use '\n' expressions in attribute replacement values: one application of this technique is changing the value of a group of URLS in some regular way. (The **Publish...** command in the H.i.P. Information Manager lets you change the scheme for a set of URLS: the '\n' is actually a more general form of this kind of substitution). For example, if you want to change all of the filenames in your A elements to have the '*.htm*' file extension instead of '*.html*', you could use the following pattern for the find text:

```
<a href="(.*)html"
```

And the replace text:

```
<a href="\1htm"
```

The element is matched by '<a'; the attribute that contains the URL value is called HREF; the pattern '(.*)' matches everything in the URL up to the characters 'html'; in the replacement, everything this pattern matched is substituted for '\1', and the characters 'htm' are appended, thus creating the modified filename.

There's an even simpler way to do this, if you're *sure* that all the filenames end in '*.html*'. Use the following find text:

```
<a href="(.*)l"
```

And the replace text:

```
<a href="\1"
```

In this case, the replacement text will consist of everything the search text matched, except the final letter 'l'.

Summary

Expression	Matches
ordinary character	itself
<name, <name>	the element name
.	any single character
x*	0 or more occurrences of the character x
(pattern)*	0 or more occurrences of pattern
x+	1 or more occurrences of the character x
(pattern)+	1 or more occurrences of pattern
x?	0 or 1 occurrences of the character x
(pattern)?	0 or 1 occurrences of pattern
pattern1|pattern2	pattern1 or pattern2
^pattern	pattern immediately following markup
pattern$	pattern immediately preceding markup
[string]	any single character in string
[^string]	any single character not in string
[char1—char2]	any character in the range char1—char2
[^char1—char2]	any character not in the range char1—char2
\n	in a replace string, is replaced by the text matched by the nth subexpression in brackets in the search string
\0	in a replace string, is replaced by the text matched by the entire search string

User-defined macros

The H.i.P. Editor's macro facility lets you create macro 'hot keys' (accelerators) that carry out a series of actions.

Macros can be associated with text and/or elements to be inserted in a document, a single command, or a complex series of commands. Some actions that you can perform with macros are:

☐ Insert an element. If you prefer to use the keyboard instead of the toolbar to insert elements, you can create macros that insert specific elements.

☐ Insert a piece of text that is used repeatedly.

☐ Create a keyboard shortcut for a command that doesn't have a built-in shortcut, subject to the *Restrictions* section (page 371).

Creating macros

The actions associated with creating (recording) a macro are as follows:

- Click on **Record Macro** in the **Special** menu. This starts macro recording. The command will then toggle to **Stop Recording**....

The progress message area of the main window displays the phrase **Recording macro** while a macro is being recorded. The usual messages like **Opening**... will show up when appropriate, but any time the message area would normally be empty, it will instead say **Recording macro**.

- Enter the sequence of actions that you want the macro to carry out. These actions will not only be recorded, they will also be applied to the current document as you're performing them.
- When you're finished, click on the **Stop Recording**... command. This command ends the macro.

Now you will get a dialog box that lets you select a name and an accelerator for the macro. The macro name is to help you identify the macro in the list in the dialog box that appears when you choose the **Run Macro**... command. The accelerator is the sequence of keystrokes that will run the macro.

An accelerator can consist of any choice from the drop-down list labelled **Key** (a letter, number, function key, or arrow key), alone or preceded by ⌈Ctrl⌉, ⌈Alt⌉, or ⌈Shift⌉ in any combination.

- Enter a descriptive name for the macro.

- Enter the accelerator. To include $\boxed{\text{Ctrl}}$, $\boxed{\text{Alt}}$, or $\boxed{\text{Shift}}$ in the accelerator, click on the appropriate check box.

If you re-use one of the H.i.P. Editor's built-in keyboard accelerators as a macro accelerator, its original functionality will be unavailable as long as that macro is loaded. You will get an error message if you attempt to use an accelerator that has already been used for another macro.

- Click on the $\boxed{\text{New Macro}}$
button when you have chosen the name and accelerator.

Macros involving toolbar buttons

If you use a button from one of the 'HTML' toolbars when recording a macro, note that even though a toolbar button can perform one of several actions (insert, change, split) only the action that was *actually performed* when you recorded the macro will be performed the next time you run the macro. For example, if the insertion point is inside a P element and you click on the $\boxed{\blacksquare}$ button, the H.i.P. Editor will split the P element. This action is recorded in a macro as 'split the current element', so when the macro is run, it will attempt to split the current element, even if it's not a P. (By contrast, if you create markup with the Insert Element... or Change Element... command, it will be played back in the macro exactly as you entered it.)

Restrictions

A macro should be self-contained, that is, its completion must not depend on any user input at the time the macro is run, such as typing in a text box in a dialog box or making a selection from a list. Consequently, there are some sequences of actions that cannot successfully be included in a macro. As a general guideline, if a macro involves invoking any of the commands whose name ends in '...', that command should be completed somewhere in the macro. So, for example, you can define a macro that inserts a particular element, but you cannot define a macro that simply brings up the Insert Element dialog box.

Mouse clicks in the document window are ignored during macro recording. The first time you attempt to use the mouse to change the selection, the H.i.P. Editor will beep. The second time, you will get a message saying that you should use the cursor (arrow) keys to change the selection.

Spell checking operations should also not be put in a macro.

Changing the accelerator

To change a macro accelerator, choose **Edit Macros...** in the **Special** menu. This command gives you a dialog box with a list of currently loaded macros.

Click on the name of the macro that you want to change. This causes the name and accelerator of the macro to appear in the controls at the top of the box.

Once you've done this you can change the accelerator for the macro by means of the **Ctrl**, **Shift**, and **Alt** check boxes and the **Key** drop-down list.

When you have made the desired changes, click on the Edit Macro button.

Deleting a macro

Edit Macros... also lets you delete a macro from the list of available macros. Highlight the macro in the list and click on the Delete button. If you delete a macro that has been loaded from a file, the macro is removed only from the H.i.P. Editor's list of available macros—it is not deleted from the file from which it was loaded, and can subsequently be re-loaded. You can delete only one macro at a time.

Running a macro

The usual way to run a macro is to type its keyboard accelerator. You can also run macros using the **Run Macro...** command in the **Special** menu. This command gives you a dialog box that lists all the macros that are currently available. This list includes macros that have been loaded from a file and those that have been defined in the current session but not saved to a file. If a macro file is loaded, the dialog box displays the filename.

To run a macro:

- Highlight the macro.
- Click on the Run button.

The H.i.P. Editor will carry out the series of operations associated with the macro. You can run only one macro at a time.

Macro options

You can set where a macro file is to be saved and what extension the macro dialog box will look for in the **Extensions/Paths** section of the **Options** dialog box. The default folder is the *macros* folder under the H.i.P. Editor folder, which you can change by typing in the path to the file, or by clicking on the [Choose File] dialog box. The default extension for macro files is *.mcr*, but you can change it if you like.

Saving macros to a file

Choose **Save Macros...** in the **Special** menu to save the currently loaded macros to a file. A macro file saved in this way can later be loaded using the **Load Macros...** command. The file saving dialog box will come up with the folder that is specified in the **Options** dialog box.

If any macros are still unsaved when you attempt to exit the H.i.P. Editor, you will get a warning message informing you of this and giving you the opportunity to save the macros before exiting.

Loading a macro file

Choose **Load Macros...** in the **Special** menu to load a macro file. The file saving dialog box will come up with the folder that is specified in the **Options** dialog box.

After a macro file is loaded, the previously loaded macros are unavailable. If any macros have been defined but not yet saved, these will be lost. Before the new macro file is loaded, you will receive a warning dialog giving you the opportunity to save any unsaved macros.

When you load a macro file, it becomes the default macro file and will be loaded the next time you launch the H.i.P. Editor. The default macro file for the H.i.P. Editor is *hip.mcr*, located in the *macros* folder under the H.i.P. Editor folder.

Macros are not associated with a specific document, so any macros you load will be available for use with all files that you are editing in the current the H.i.P. Editor session.

H.i.P. Monitor Administration

The H.*i*.P. Monitor will watch and test your intranet server, its operating system, your server clients and their intranet pages 24 hours a day. Changes, problems, failures, and interruptions will be detected and recorded according to your specifications. As the systems administrator, you, or the people you designate, will be kept informed by e-mail. Your intranet users will also receive notification when the H.*i*.P. Monitor supplies page-watching services that have been requested through the H.*i*.P. Viewer.

The H.*i*.P. Monitor has only one hard part: it asks you to put aside your expectations about how a program should communicate with you. Once you manage that, the rest is easy.

What the H.i.P. Monitor can do—and how

The H.i.P. Monitor's main contribution to your site administration is that it lets you know when things happen—especially when things go wrong. Take operating system alerts as an example. You may have told the Monitor to watch the storage devices and 'speak up' when one of them reaches a certain percentage of its capacity. If that happens, the H.i.P. Monitor prepares a message that contains specific information about the device and the nature of the event, then sends you e-mail.

Of course, you don't necessarily want to know every detail of every possible event at all times of the day or night. Fair enough: the H.i.P. Monitor lets you specify what you want to know, where the alert threshold should be set, and when the event should be checked. In other words, the H.i.P. Monitor is ready to act as your agent—to carry our your intranet monitoring instructions in as much detail as you wish.

There are three areas that the H.i.P. Monitor will keep an eye on for you:

☐ Events in the server software.

☐ Events in the server software's operating system.

☐ Events on the Web site.

This last area, which includes page changes, needs some preliminary clarification: intranet users, who may be unaware of the H.i.P. Monitor, will nevertheless be familiar with H.i.P. Viewer's subscription feature. It's the Monitor, acting in the background, that notifies subscribers of changes to pages. The Monitor will also see to it that everyone who is on a page's distribution list receives e-mail notification when the page is published.

Speaking H.i.P.

The H.*i.*P. Monitor does not run on your PC—it runs on your site's intranet server. It does its work by investigating events and conditions on your server and sending messages to its clients (your own PC and other PCs in your company) as well as to other connected systems.

The H.*i.*P. Monitor does not have its own Windows user interface. Instead, it communicates with you through HTML pages and e-mail messages. You can control the behavior of the H.*i.*P. Monitor, or receive its reports and notifications, from any location that is equipped with e-mail and a browser.

A first look at the H.i.P. Monitor

You have probably browsed some Web or intranet pages that have forms to be filled out. When you submit the content of these forms for processing you are actually communicating with a program on a Web server. This is the way you talk to the H.*i.*P. Monitor—you fill out a form on the H.*i.*P. Monitor's intranet page as you are viewing it in your H.*i.*P. Viewer.

Of course, this is not a 'public' intranet page posted for anyone to browse. It's your page and you have a password to access it. Once you have installed the H.*i.*P. Monitor on your intranet server, you can surf to the Monitor homepage.

■ Click on the H.*i.*P. Monitor Administrator icon in the H.*i.*P. Program Group (it will look like the icon for your browser—Netscape Navigator or Microsoft Internet Explorer).

When the browser comes up, it will display the H.*i.*P. Monitor's homepage, as installed on your server.

■ You may wish to add the homepage to your **Bookmarks** or **Favorites** list.

The H.i.P. Monitor works 'in the background' when you subscribe to a page using the H.i.P. Viewer. Clicking on the [⬤] button in the H.i.P. Viewer toolbar brings up a menu of commands that let the user send subscription requests to the H.i.P. Monitor. See page 159 for more information on subscribing using the H.i.P. Viewer.

The Monitor is also responsible for making sure that, when an author or publisher sets up a distribution list for a document, all of the e-mail addresses on the list receive notification. See page 128 for more information on distribution lists.

Much of what the H.i.P. Monitor does requires reporting to you, the administrator. You can read the Monitor's weekly reports by surfing to the Monitor's intranet page and clicking on the appropriate week. Here you will find a list of everything that the Monitor has discovered during the week: broken H.i.P. page links, subscriber requests, server interruptions, system alerts, suspicious requests, root logins, etc.

- Click on **Browse Events**.

The BROWSE EVENTS page presents a table of events, ordered by date, that have occurred in the current week (beginning Sunday night). You can move from week to week by clicking on PREVIOUS WEEK or FOLLOWING WEEK. Clicking on these now will have no effect because there isn't yet a history of events to view.

- Return to the H.i.P. Monitor homepage (actually its menu page) by clicking on the word MENU in the banner that spans the top of your page.

A general approach to event choice and configuration

The first thing you must do to access these administrative choices is set a password, if you have not already done so.

The default installation password is 'admin'. There was an opportunity to change it during installation, and you can also change at any time thereafter:

- Click on **Change Password** on the MAIN MENU (default) page. A new page will appear on which you will be asked to type both your old and your new passwords.

- Finish by clicking on `Submit Changes` .

Choosing and configuring Monitor events follows a consistent pattern, described here.

Variations and details that depart from this general approach are described below under each event name. To set up events:

- Click on **Setup Events** on the MAIN MENU page. You will be prompted for your password (unless you've already entered it sometime in this session), and then the EVENT SETUP page will appear.

The four event groups are displayed on this page:

- ☐ **Web Server Software Events**
- ☐ **Web Client Events**
- ☐ **OS Events**
- ☐ **Changed Pages Events**

The H.i.P. Monitor can be installed on two possible operating systems—UNIX and Windows NT. Furthermore, under Windows NT there are two possible server combinations—Netscape and Microsoft Internet Information Server. This means that there are a total of three possible installation configurations. Each configuration produces a slightly different list of events on the EVENT SETUP page.

There are several events in each group. Under any of the four groups, you can click on any or all of the check boxes, enabling or disabling monitoring for each corresponding event.

Each event has a [Configure] button beside it. Let's take a moment to explore one of the more complex configuration pages. (This page will be examined in more detail below—in the meantime, you don't have to save any changes you might make.)

- Click on the **Enable** check box beside the **Netscape Server Down** event in the **Web Server Software Events** group.

- Click on the [Configure] button.

For this and other events, the EVENT CONFIGURATION page that appears gives an explanation of the event and explains any configuration that you can perform. This page also has a [Save and Return to Setup] button, and a [Reset] button.

- Expand the **When to Monitor** list box and note the number of choices.

You will almost certainly want to be specific about scheduling for each event. Your choices are:

☐ **Always:** 24 hours a day, seven days a week.

☐ **Overnight:** from 02:00 to 04:00, seven days a week.

☐ **Weekdays:** 24 hours a day, Monday to Friday.

☐ **Business Hours:** from 09:00 to 17:00, seven days a week.

☐ **Weekends:** 24 hours a day, Saturday and Sunday.

☐ **After Hours:** from 17:00 to 09:00, seven days a week.

☐ **Weekday After Hours:** from 17:00 to 09:00, Monday to Friday.

☐ **Weekday Business Hours:** from 09:00 to 17:00, Monday to Friday.

You can make a different configuration schedule choice for each separate event. When you have finished examining the page:

- Click on the ⬚ Reset ⬚ button.
- Click on the ⬚ Save and Return to Setup ⬚ button, or click on the ⬚ Back ⬚ button in your Web browser.

This configuration page is fairly typical, though many events have fewer and more obvious choices.

If you enable an event but don't set up your own configuration, the H.i.P. Monitor will use its default configuration for the event. These defaults generally produce useful information on any system. For example, in most cases, the **When to monitor events** choice is **Always** so you won't accidentally miss anything. Default configurations are supplied for each operating system so that the default choices are always functional (e.g., for Web Client events, the default is **Overnight** so that you don't get informed too often of site problems).

This configuration information is saved on the intranet server, not on your local drive. That means that you can access and change these configurations at any client PC that has system access—just surf to the H.i.P. Monitor Administrator page and make the changes.

All of these events are checked and rechecked—but at varying frequencies. Events like broken links and page expiry are checked every day, while user and root logins are checked every two minutes. In some cases, a persistent condition (the long-term failure of a process, for example), will generate a number of e-mail messages, all relating to the same failure.

At the bottom of each event group on the EVENT SETUP page, you will find a field for an e-mail address. A different e-mail address can receive notification for each group of events; for example, the person responsible for the intranet server software events could be different from the person responsible for operating system events. If no one is specified, then you, as the administrator, will receive e-mail notification.

A note regarding e-mail addresses

While 'embellished' e-mail addresses are common in many systems, the H.i.P. Monitor uses a restrictive definition of a valid e-mail address. You must use 'bare' email addresses in the Monitor. Only addresses in the following format can be used by the H.i.P. Monitor:

```
name@(machine.)server.type
```

(For example, *charles@windsor.org* and *jeanc@ottawa.gov.ca* are valid addresses for the H.i.P. Monitor.)

A comma separated list of e-mail addresses, in the format shown above, is also accepted by the H.i.P. Monitor. Any other kind of email address—containing real names, other text, etc.—is *not* valid in the Monitor.

Operating other main menu functions

Before we actually complete a setup by configuring events, let's take a look at the other choices on the MAIN MENU page. If you are not already there, return to the MAIN MENU by clicking on MENU in the H.i.P. Monitor banner that spans the top section of your browser window.

On the MAIN MENU page you can start and stop the monitoring processes. After each choice, the Monitor will respond with a confirmation page.

> **Note** Starting the Monitor and stopping it again before receiving start-up confirmation may cause problems. Since it takes time for the Monitor to start all of its processes, stopping within a few seconds of start-up can leave processes running. Wait for the start confirmation page to appear before clicking on 'Stop Monitor'.

■ Click on **Start Monitor**.

The H.i.P. Monitor will display a confirmation page.

■ Wait for e-mail confirmation that all Monitor processes have started.

■ Click on ⌈ Back ⌋ or MENU (in the page banner) to return to the MAIN MENU page.

■ Click on **Stop Monitor**.

The H.i.P. Monitor will display a confirmation page.

■ Wait for e-mail confirmation that all the Monitor processes have stopped.

■ Click on **Start Monitor** and wait for confirmation.

■ Return to the MAIN MENU page after the confirmation page appears.

Generating a test event will confirm that your system is up and running.

■ Click on **Generate Test Event** in the MAIN MENU page.
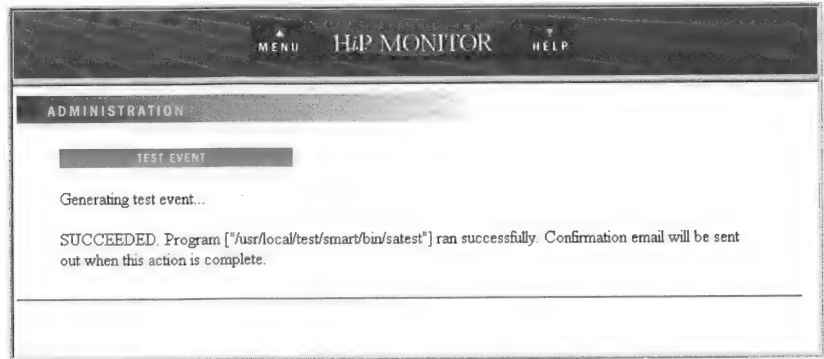
■ Return to the MAIN MENU page.

Setting up your own configurations

A general description of setting up event configurations is given above (see page 379). This section deals with the specifics of each event. To reach the EVENT SETUP page:

■ Click on **Setup Events** on the MAIN MENU page.

You will be prompted for your password unless you have already entered it in this session.

■ If prompted, type your password in the text box and click on the ⟨ OK ⟩ button.

The EVENT SETUP page will be displayed.

Each event group lets you specify up a **Contact Email** address that will be notified if an event in that group occurs. You should also specify an **Administrator's Email** address; if the **Contact Email** is not specified for a group, the administrator will be notified instead.

To enable a particular event and edit its configuration:

- Click on its **Enable** check box, then click on the corresponding [Configure] button.

The following sections describe, for each event, what you can do after clicking on [Configure] .

Web Server Software Events

The intranet Web server software event category groups together a number of server failure events and events that are defined through SNMP (simple network management protocol). Some of these events are specific to UNIX, some are specific to Windows NT servers running the Netscape Web server, and some to only Windows NT servers running the Microsoft Web server. Depending on your platform and server, some of the events described below will not appear on your H.i.P. Monitor pages, or will be disabled.

For each event, you can specify the monitoring schedule by making a choice from the **When to monitor** drop-down list.

Web server down

The H.i.P. Monitor will run a process status command to determine that particular processes are running. You can query the status of as many as three processes by typing their names in the **Web server processes to watch** text boxes. These names need not be complete, but must be uniquely identifiable in the output from the *ps -e* UNIX command. This event applies only to UNIX.

Typically, you would query the status of the process corresponding to your server, for example, *httpsd* (this is offered as a default).

Network process down

When an intranet server process is not running, the H.i.P. Monitor detects the failure condition and sends notification. This is similar to **Web server down**. This event applies only to UNIX.

You can query the status of as many as eight network processes by typing their names in the **Network processes to watch** text boxes. These names need not be complete, but must be uniquely identifiable in the output from the *ps -e* UNIX command.

Default choices are offered. While they differ slightly for different UNIX platforms, they can include:

- *swapper*
- *init*

- *portmap*
- *snmpd*
- *inetd*
- *ptydaemon*
- *telnetd*
- *nfsd*

Any process that is normally not running on your system should be deleted from this list; otherwise, you'll receive unwanted notifications that the process isn't running.

Netscape server down

The **Netscape server down** event queries the SNMP service to determine whether the Netscape server is down. If it is down, you will be notified. This event applies only to UNIX and Windows NT (Netscape server). If you are running Windows NT, you'll also have to install and configure the SNMP service; see your Netscape server documentation for details.

Too few idle server processes—Netscape SNMP

This monitors the Netscape server and reports if the number of idle server processes has dropped below the specified threshold. The threshold is determined in the **Notify if there are fewer than _ idle processes** box. This event applies only to UNIX. If this event occurs, you should probably change your server configuration to run more processes.

Too many request errors—Netscape SNMP

This event queries the SNMP service to determine the number of 400-series requests (errors) over a five minute period. If that number exceeds the number you specify in the text box, you will be notified. This event applies to Windows NT (Netscape server) only.

Suspicious request— Microsoft SNMP

This event queries the SNMP service to detect unusual requests that use methods other than GET, POST or HEAD, and notifies you. These requests may constitute a security breach and should be investigated. This event applies to Windows NT (Microsoft server) only.

Too many 'Not Found' errors—Microsoft SNMP	This event queries the SNMP service to determine the number of 'Not Found' errors over a five minute period. If that number exceeds the number you specify in the text box, you will be notified. This event applies to Windows NT (Microsoft server) only.
Specify an e-mail address	Before continuing with the **Web Client Events**, type a valid e-mail address in the **Contact Email (name@host)** text box. For e-mail address restrictions, see page 381.

Web Client Events

Web client events are those that are likely to interest both the intranet administrator and intranet publishers. They have to do primarily with the timeliness and linking integrity of H.i.P. documents. H.i.P. document authors and publishers can attach 'meta' information to their documents: among other things, this information can specify the 'effective life' of a document. These event notifications apply to all of servers supported by the H.i.P. Monitor.

For more details about adding this kind of information to H.i.P. documents, see page 63.

For each event, you can specify the monitoring schedule by making a choice from the **When to monitor** drop-down list.

Page expired

H.i.P. document authors and publishers can attach an expiry date to a document. If any of these documents age beyond their expiry dates, the H.i.P. Monitor will signal this condition, naming the document.

Page effective

The effective date is the date at which a document that is already stored on the intranet site becomes effective and should, therefore, be offered to clients. This allows new content to be prepared in advance and 'released' at the appropriate time. The 'page effective' event will be detected if a page has an effective date that has become current. When the event is detected, notification is sent to the e-mail address specified in the event configuration. If no e-mail address is specified, the notification goes to the administrator.

Page effective—replace page	A page may become effective and replace an existing page. Enable this event if you want an expired page to be automatically replaced by a page that has become effective. Though you may choose to enable this function, newly-effective pages will replace expired ones only if the author has specified the target of the replacing page.
Broken links	Broken links—those that attempt to connect to a page that is no longer available, are detected automatically.
	This event will be detected if broken links are discovered while scanning projects under the document root (and, under UNIX, home directories). Links to external sites are not checked.
Specify an e-mail address	Before continuing with the **OS Events**, type a valid e-mail address in the **Contact Email (name@host)** text box. For e-mail address restrictions, see page 381. If no e-mail address is specified, notification is sent to the administrator.

Operating System (OS) Events

The H.i.P. Monitor can detect whether the hardware and software platform on which the intranet server software runs has failed or deteriorated in a way that may affect server software operations. Certain of these events apply to UNIX platforms only.

For each event, you can specify the monitoring schedule by making a choice from the **When to monitor** drop-down list.

Disk too full

The **Disk too full** event is configured with a detailed pair of lists so that storage use can be assessed specifically. Each storage device can have its percentage of capacity full limit set individually.

The following events apply to UNIX only:

☐ On the left side of the configuration page is a list of **FileSystem Mount Points** (storage devices). On the right side, with fields that correspond to each storage device, are eight (on UNIX) or three (on Windows NT) **Percentage Full** limits. You must specify the name of the mountpoint exactly; e.g., */usr.*

☐ Removing core files may free up some space on your drives. If you wish, the Monitor will take this step in response to a 'disk too full' event. To instruct the Monitor to make this response:

■ Choose **Remove core files** from the **To automatically recover** pull-down list.

If you are running a Windows NT server, on the left side of the configuration page will be a list of **Drive Letters** (storage devices). On the right side, with fields that correspond to each storage device, are three **Percentage Full** limits.

> **Note** Both network and local drives can be monitored. Removable media such as floppy and CD-ROM drives will be ignored.

Root login (UNIX only)

This is a very simple detection: that a user has logged in as 'root'. This could be a suspicious or dangerous login, especially during non-business hours.

The default **When to monitor** value for this event is **After Hours**.

User login (UNIX only)

This is a very simple detection: that a user has logged in. It reports the user name and login time:

```
"The user jdoe has logged on to the server
at Nov 19 12:51:34 1996."
```

The default **When to monitor** value for this event is **After Hours**.

Load too high (UNIX only)

This event will notify you if the average number of jobs in the run queue over the last five minutes exceeds the threshold you specify. The default is 7.00; you can use the *uptime* command (preferably when the system is heavily loaded) to determine what value is appropriate to your system.

To complete the configuration:

- Enter the maximum number of jobs in the **Notify when load exceeds** box.

Contact email

Before continuing on to **Changed Pages Events**, type a valid e-mail address in the **Contact Email (name@host)** text box. For e-mail address restrictions, see page 381.

Changed Pages Events

From an intranet reader's point of view, notification of page changes will be the most familiar notification service offered at the H.*i*.P. Web site—though they may not be aware that the H.*i*.P. Monitor provides the service. These event notifications are applicable to all types of servers.

For each event, you can specify the monitoring schedule by making a choice from the **When to monitor** drop-down list.

> **Note** You can specify a contact email address for this category, but the H.i.P. Monitor won't actually use it.

Page changed

The administrator can choose to turn off the **Page changed** event for all users. This might be necessary in a case where a user chooses a subscription that results in an unnecessary flood of network traffic.

Project published

The author or publisher can group the e-mail addresses of a number of intranet readers who will be notified when a document or project is published—a *distribution list*. When the page or project is published, the Monitor detects the event and notifies the members of the distribution list by e-mail. The users who are listed in the distribution list can also be added as subscribers to all of the pages in a project; they will be notified of any subsequent changes to the pages.

Glossary

This chapter defines many of the terms introduced in the H.*i*.P. manuals, some of which are commonly heard when talking about the Web. In each definition, the first occurrence of a term that also has a definition in this glossary is marked with a dagger ([†]).

ActiveX

ActiveX controls are programs that can be referred to in various types of documents and applications under Microsoft Windows, including HTML documents. These programs perform some action in the browser window. OLE is the mechanism under Windows by which ActiveX controls can communicate with a browser. Not all browsers support this feature. See also *Java*.

anchor

1. An element[†] in an HTML[†] document that points to one of:
   - another document
   - a specific location in another document
   - a specific location in the current document

2. An element that denotes a specific location in a document, pointed to by another anchor.

When the document is displayed in a browser, clicking on an anchor (of the first type) causes the browser to display the document and/or the location that it points to.

annotation

A comment that can be attached to a specific place in a H.i.P. document using the H.i.P. Viewer. Annotations are generally saved to a separate *.hpa* file, but can be merged into a H.i.P. document using the H.i.P. Editor.

applet

See *Java*.

attribute

A value that is associated with an element[†] but is not part of the *content* of the element (that is, text or sub-elements). For example, the URL[†] part of an anchor[†] is an attribute; you would use an attribute to specify the alignment of an image. In an HTML[†] file, the attributes are actually located inside the element's start-tag, but when you're editing in H.i.P., you view and edit attributes using the H.i.P. Editor's **Element Attributes...** command.

browser

A networked program that communicates with Web servers[†], used for retrieving and displaying documents from the World Wide Web[†]. Compare this with *editor*. Some well-known browsers are Mosaic[†], Netscape Navigator, Internet Explorer, Lynx[†], and Cello.

cascading style sheet (CSS)

A specification for defining formatting styles for HTML documents. A cascading style sheet consists of one or more rules. Rules can associate an element, an element in a particular context, certain attributes, or a group of elements with settings for font size, indentation, margins, and many other formatting properties. A rule can also specify that part of the document is to be hidden by the browser.

A style sheet can 'import' another style sheet. These style sheets are said to be 'cascading' because multiple style sheets can be applied to the same document, but there are a set of cascading rules that specify which style sheet's rules apply to a particular element. See the CSS standard at *http://www.w3.org/pub/WWW/TR/WD-css1.html* and the chapter *Styles* (page 89) for more information.

CERN

The European Laboratory for Particle Physics in Geneva, where the World Wide Web[†] was 'invented'. For more information, see *http://www.cern.ch/*.

CGI	An acronym for Common Gateway Interface. This is a feature of Web servers[†] that allows HTML clients[†] such as browsers[†] to communicate over the Web with scripts installed on the server. HTML forms[†] are often processed by such scripts. 'CGI scripts' can be written in any programming language that will run on the server.
class; CLASS attribute	HTML 3.0 added the CLASS attribute to many HTML elements. In general, elements can be given the same CLASS attribute value to mark them for special processing. SoftQuad H.i.P. uses this attribute to implement UDEs. A set of elements (possibly different types of elements) that have the same CLASS value is referred to as a 'class'. Style properties can be applied to members of a class using cascading style sheets.
clickable image map	See *image map*.
client	A program, such as a browser[†], that uses HTML[†] and communicates with a Web server[†].
client-side image map	See *image map*.
cyberbolic display	The cyberbolic display (seen on the right side of the H.i.P. Information Manager window) shows the link structure of your H.i.P. project as if it were sliding on the surface of a sphere. The cyberbolic display starts from a *home page*: all links go 'outwards' from the home page. The various colors used to display the links give information about the type of link.
DNS	Domain Name System. This is the way in which the network turns a host or Internet domain (e.g., *sq.com*) into an Internet IP address for use with TCP/IP[†].

document properties

Attached UDE[†] files, Live TOC[†] files, and cascading style sheets as well as special document information used by the H.i.P. Monitor are referred to as document properties. They can be viewed and modified from the **Document Properties** dialog box in the H.i.P. Editor or Information Manager.

editor

A program, such as the H.i.P. Editor, used to create or change the content of, HTML[†] documents. Compare this with *browser*.

effective date

The effective date information is used by the H.i.P. Monitor to determine when documents are to become *effective*; that is, when the document becomes active, and when those documents should *expire*.

element

Elements are the structural building blocks of HTML[†] documents. Blocks of text in HTML documents are surrounded by elements according to their function in the document: for example, headings, lists, paragraphs, and anchors are all surrounded by specific elements.

firewall

In networking, a firewall is a computer that prevents an intruder from accessing all the computers on a network if he or she manages to break into one computer someplace. The firewall usually sits between your inside network and the outside Internet. For more information, see Cheswick & Bellovin's approachable book *Internet Firewalls: Repelling the Wily Hacker*.

form

A group of elements (enclosed by a **FORM** element) in an HTML[†] document, which generate graphical controls such as text boxes, radio buttons, and check boxes when the document is displayed in a browser. The user can enter information in a form and use the browser to submit it to a program on a Web server[†].

frames

Some browsers[†] support special elements that let you divide the browser window into several sub-windows, called frames, each of them displaying a different document.

FTP

The File Transfer Protocol; one of the schemes[†] that can be specified in a URL[†]. This has traditionally been one of the most important of the network services. It lets you pick up a copy of a file from a remote

computer, provided that you can connect to that computer (with TCP/IP[†], for example).

GIF

One of the unofficial standard graphics formats used in HTML[†] documents. This format is owned by CompuServe. See also PNG and JPG.

gopher

A line-mode Internet protocol that predates the Web[†]. Web browsers[†] can normally communicate with gopher servers.

H.i.P. Editor

A fully-featured HTML editor, based on SoftQuad HoTMetaL PRO. You can create and edit individual H.i.P. or HTML documents, using special H.i.P. markup features such as pop-ups and one-to-many links.

H.i.P. Information Manager

The control center of H.i.P. It allows you to manage H.i.P. projects, including creating new projects, editing projects, moving projects to an intranet server (publishing), and launching all the editor components of SoftQuad H.i.P.: the H.i.P. Editor, the CSS Editor, etc.

H.i.P. Monitor

A program that keeps watch over your intranet for specified events, and informs users. You can access the monitor controls from the H.i.P. Viewer. Intranet administrators can set various options for the H.i.P. Monitor.

H.i.P. Pockets

User-defined sets of files that are useful for managing projects. You can create H.i.P. Pockets based on a variety of criteria, such as search results, files with broken links, orphaned files (files without any links to them), etc. Once you have created a H.i.P. Pocket with a certain type of file in it, you can then delete, copy, or rename listed files all together, rather than trying to find each and every file in the project display.

H.i.P. Viewer

Plug-ins that let you read documents in H.i.P. format using your Netscape Navigator or Microsoft Internet Explorer Web browser.

home page

An HTML document that is either:

1. The top-level document on an organization's Web server[†], usually containing introductory information and links to other relevant pages[†].

2. The starting page for a H.i.P. project, where the link displays are built from.

hot image; hot spot; hot text

Hot text is text in a hypertext[†] document (such as an HTML[†] document) that is a link to some other file; a hot image is an image that is a link to some other file; a hot spot is hot text, or a region in an image map[†].

HTML

The HyperText Markup Language. This is the usual format for documents that are 'published' on the Web[†]. HTML is an application of SGML[†].

HTML browser

See *browser*.

HTTP

The HyperText Transfer Protocol. This is used to transfer HTML documents over the network, between a Web server[†] and an HTML browser[†], while you wait. The HTTP protocol is implemented by a number of Web servers.

HTTP server

See *Web server*.

hypertext

Text that contains links to other documents. HTML[†] documents are examples of hypertext.

ICADD

The International Committee for Accessible Document Design. Techniques created by ICADD and documented in ISO 12083 specify how to automatically transform SGML[†] files (including HTML[†] files) into input to a Braille, large print, or synthesized voice system. All HTML documents created by H.i.P. are ICADD-ready and can readily be converted to these formats using ICADD techniques.

ID

An attribute added to most HTML elements in HTML 3.0. Used for constructing style sheets: an ID attribute uniquely identifies a single instance of an element so that a style rule can be constructed for that element in a cascading style sheet.

IETF

The Internet Engineering Task Force, responsible for the technical management of the Internet. The IETF coordinates the development of the HTML[†] standard.

image map;
image map file

An *image map* is an image that is divided into regions, each of them associated with a URL[†]. Clicking in a region causes the file referred to by the associated URL to be accessed. An image map is also called a *clickable image map*. There are two kinds of image maps: *server-side* (ISMAP) image maps require an external *image map file* that defines the regions in an image map and assigns them to URLs. *Client-side* (USEMAP) image maps accomplish the same thing using special elements in the document itself. Client-side image maps are easier to implement but are not supported by all browsers.

interlaced image

An image that is first displayed in the browser at a low resolution, and then in successively higher resolutions, until the whole image has been downloaded. This is sometimes referred to as *progressive display*. GIF[†], JPEG[†], PNG[†] images can be interlaced. Not all browsers support this feature.

Internet
Explorer

A popular browser developed by Microsoft Corporation.

intranet

An 'internal net', whose pages are available only on a local server. An organization can use Web technology, such as browsers, servers, and editors to share information among its members or employees, but not make this information accessible over the WWW.

ISMAP

See *image map*.

ISO
The International Organization for Standardization ('ISO' is not an exact acronym).

ISO 8859/1
character set
This is the character set for 'special' or 'accented' characters supported by HTML. This character set is also called 'ISO Latin 1'. It includes characters required for most western European languages: Dutch, English, French, German, Italian, Irish, the 'Iberian' languages, and the 'Nordic' languages. This character set is one of several in the ISO 8859 standard: others support, for example, eastern European languages and Cyrillic-based languages. Only ISO 8859/1 is currently supported by HTML, however.

Java
Java is a programming environment that operates in conjunction with certain browsers[†]. It lets you refer to and run programs, called *applets*, from an HTML document. Applets perform some special processing in the browser window, such as drawing a picture or interacting with the user. The Java programming language is a platform-independent object-oriented language, with some similarities to C and C++. See also *ActiveX*.

JavaScript
JavaScript is a programming language that is loosely based on Java[†]. Instead of being *referred to* in an HTML document, as Java applets are, JavaScript code is embedded in the document itself, using the SCRIPT element.

JPEG
An image format that is commonly supported by Web browsers[†]. JPEG is an acronym for Joint Photographic Expert Group.

line-mode
browser
An HTML[†] browser that can be used on a 'dumb terminal' such as a VT100 or a PC with communications software. The most common are Lynx[†] and a program called *www* from CERN[†].

link
See *anchor*.

Live TOC
Live tables of contents. Live TOCs are dynamic (that is, *live*) tables of contents that you can define for your H.i.P. documents. To define a Live TOC, you specify the set of HTML elements, and possibly UDEs, that you want to appear in the Live TOC. When you view a document

that has a Live TOC file linked to it using the H.*i*.P. Viewer, a table of contents is created dynamically from your selection of elements and appears in the H.*i*.P. Viewer's navigation panel.

Lynx A common line-mode[†] HTML[†] browser[†]. Lynx can be used over a dial-up line or if you don't have a windowing system.

mailto A scheme[†] that causes a browser to send a form to a particular e-mail address, or generate a mail-editing window.

markup Special codes in a document that specify how parts of it are to be processed by an application. In a word-processor file, markup specifies how the text is to be formatted; in an HTML[†] document, the markup specifies the text's structural function (heading, title, paragraph, etc.).

marquee A piece of text that scrolls across a browser[†] document window. This feature is implemented using the MARQUEE element. Not all browsers support marquees.

meta data Information that is read by a Web or intranet server about a document. It could be indexing information for search purposes, document creation and expiry information, etc. Meta data is contained within META tags in the HEAD element. In SoftQuad H.*i*.P., meta data is used to tag certain documents for identification and processing in the H.*i*.P. Monitor and set search parameters.

MIME The Multipurpose Internet Mail Extensions (RFC 1510): extensions that allow e-mail messages to contain audio, video, and multiple files. It is also the format that Web servers[†] and browsers[†] use to transfer files. The MIME *content type* of a file tells a browser how to process it. The content type for HTML files is 'text/html'. While H.*i*.P. files are HTML files, the special content type that allows the H.*i*.P. Viewer plug-ins to work is 'text/x-vnd.sq.hip'.

Mosaic One of the most widespread HTML browsers[†].

NCSA	The National Center for Supercomputing Applications, located at the University of Illinois at Urbana-Champaign, Illinois. The NCSA is an (indirectly) U.S. government-funded body that exists to try and make powerful computers more accessible to researchers. Mosaic[†] was originally written at NCSA.
Netscape Navigator	A popular Web browser developed by Netscape Communications Corporation.
OLE	See *ActiveX*.
one-to-many link (Multiloc)	H.i.P. documents can display links from a single location to many other documents or document locations. These links are called *one-to-many links* or *multilocs*. A multiloc appears as a small icon in the H.i.P. Viewer. When the user clicks on the icon, a pop-up menu will appear, displaying all of the links accessible from that single location. A MULTILOC is implemented as a MENU element with its CLASS attribute set to MULTILOC. The MENU consists of one or more LIs. Each link in a multiloc consists of an A element inside an LI.
page	A single HTML document (which can be longer than one screen).
panel	A sub-window area in the Information Manager.
PNG	Portable Network Graphics; pronounced 'ping'. A graphics format intended as a replacement for GIF[†], on account of patent infringements involving the compression algorithm used with GIF. PNG is a 'lossless' format; some of its advantages over GIF are better (24-bit) color support, compression, and anti-aliasing and transparency capabilities.
pop-up	Part of a H.i.P. document that is represented by an icon in the H.i.P. Viewer. Clicking on the icon displays the content in a pop-up window. There are two types of pop-upes: block and inline. Block pop-ups can contain text, markup, images, etc., and are displayed in a

separate browser window. Inline pop-ups can contain only text and are displayed in small inline windows that disappear when you click.

progressive display

See *interlaced image*.

project

A defined group of files, consisting of linked HTML files, auxiliary H.i.P. files, and linked files in other formats. Projects are displayed and managed in the Information Manager.

proxy server

If you have a firewall† at your site, you can't normally connect directly to a server† on the Internet. You need an agent, a proxy server running on the firewall, to make the connection for you. To you, inside the firewall, it pretends to be the server that you're attempting to connect to; on the outside, it pretends to be the client, and talks to the real server, thus letting you talk to a server outside the firewall (or vice versa).

publishing

Publishing a H.i.P. project means moving your documents to an intranet server so that other H.i.P. users can have access to your project. The publishing component of the Information Manager lets you publish some or all of your files to a local or remote server. Once you have specified the destination server for your documents, the SoftQuad H.i.P. publishing component will automatically log in to the server and deliver the files to the location you specify.

relative URL

A URL† that is missing some information (such as the scheme† or network location), which a browser† is expected to inherit from the URL of the document that contains the relative URL.

scheme

The part of a URL† (e.g., *http* or *ftp*) that tells an HTML client† such as a browser† how to retrieve the file specified in the URL. Also called 'protocols'.

server

See *Web server*.

SGML An international standard for describing the markup[†] of structured documents. The basic idea behind SGML is that information can be made independent of particular hardware and software. This is done by storing all documents as text-only files (with references to documents in other formats, such as graphics, when required), and using markup that describes the *structure* of documents, rather than their physical appearance. SGML is described by the ISO 8879 standard (1986). HTML[†] is an application (a particular instance) of SGML.

subscribe The H.i.P. Monitor keeps track of pages in a project that change, and notifies a list of *subscribed* email addresses. You can subscribe to a document from the H.i.P. Viewer or create a subscription list from the Information Manager.

tag An element[†] in an HTML file begins with a *start-tag* (e.g., '<PRE>') and (usually) ends with an *end-tag* (e.g., </PRE>). In the H.i.P. display tags are represented by tag icons at the beginning and end of an element. Sometimes tags are called 'commands', but this isn't correct.

TCP/IP Transmission Control Protocol/Internet Protocol. This is the low-level protocol used by much of the Internet. It's really two protocols; IP packets are sent over a network that itself uses TCP. Other common variations include SLIP (pronounced 'slip'; Serial Line Internet Protocol), and PPP (Point to Point Protocol).

transparent GIF A GIF[†] image that has had one color (usually the dominant background color) designated as 'transparent', so that when the image is displayed in a browser, the image's background is colored with the browser's background color. The desired effect is an image that does not have a rectangular boundary.

UDE *User-defined extension.* An HTML element with a specified CLASS attribute, which is treated by H.i.P. as a separate element. Used in SoftQuad H.i.P. to extend and increase the power of HTML.

URI Uniform Resource Identifier. This is a generic name for any of a class of ways of identifying resources on the Internet. Three types of URIs are URCs (Uniform Resource Classification), URLs (see the next

entry), and URNS (Uniform Resource Name). Implementations of URCS and URNS are still in an experimental stage. The basic idea is that a resource (e.g., a document) is identified by a URN, a kind of 'public identifier' in the SGML[†] sense. The URN is resolved into a URC, which is a collection of information about the resource (it could include, for example, the price of obtaining the resource, and one or more URLS).

URL
Uniform Resource Locator. A URL is the address of a file, written in a format that can be interpreted by a server[†], which then retrieves the file. A URL consists of a filename and, usually, a scheme that tells how the file is to be retrieved. For most files on Web and intranet servers, the scheme *http*[†] is used.

USEMAP
See *image maps*.

view
A view can refer to any style sheet choice that you make in the H.i.P. Viewer. It can also refer, more specifically, to a special SoftQuad H.i.P. style where an HTML element, UDE, **CLASS** or **ID** attribute can be *hidden*. Views are used to determine the display of information in the H.i.P. Viewer.

W3C
The WWW Consortium. This has been set up at MIT, modelled after the X Consortium that promotes X Windows. W3C is a not-for-profit organization that provides sample code and co-ordinates standardization. For more information, see *http://www.w3.org/*.

Web, the
An informal name for the World Wide Web[†].

Web server
A networked program that responds to requests from local or remote computers for HTML[†] files. You give the Web server[†] a file name (in the form of a URL[†]) and it gives you back the file (which can be in any format, text or binary) over the same network connection.

| World Wide Web | This is a generic term for the collection of Web servers[†] and browsers[†] that literally spans the world. Usually abbreviated www. |
| WWW | The World Wide Web. |

Appendix 1: SGML conformance

SoftQuad H.*i*.P. is an SGML Application Conforming to International Standard ISO 8879 — Standard Generalized Markup Language.

SoftQuad H.*i*.P. conforms to the following system declaration (see clause 15.6 of ISO 8879):

```
<!SYSTEM "ISO 8879:1986"
        CHARSET
                BASESET "ISO 646-1983//CHARSET International
Reference Version (IRV)
                //ESC 2/5 4/0"
                DESCSET
                        0       9       UNUSED
                        9       2       9
                        11      2       UNUSED
                        13      1       13
                        14      18      UNUSED
                        32      95      32
                        127     1       UNUSED
                BASESET "ISO Registration Number 109//CHARSET
                ECMA-94 Right Part of Latin Alphabet Nr. 3//ESC 2/13 4/3"
                DESCSET
                        128     32      UNUSED
                        160     5       32
```

```
                        165    89    32
                        254    1     127
                        255    1     UNUSED
CAPACITY PUBLIC
        "ISO 8879:1986//CAPACITY Reference//EN"
FEATURES
        MINIMIZE
                DATATAG      NO
                OMITTAG      YES
                RANK         NO
                SHORTTAG     YES
        LINK
                SIMPLE       NO
                IMPLICIT     NO
                EXPLICIT     NO
        OTHER
                CONCUR NO
                SUBDOC NO
                FORMAL YES
SCOPE DOCUMENT
SYNTAX PUBLIC
        "ISO 8879:1986//SYNTAX Core//EN"
VALIDATE
        GENERAL            YES
        MODEL        YES
        EXCLUDE            NO
        CAPACITY           NO
        NONSGML            NO
        SGML         YES
        FORMAL       YES
        SDIF         NO
        PACK         NO
    >



    •
```

Appendix 2: File conversion

You can edit the file *htmstd.cfg* in the SoftQuad H.i.P. *sqkw* folder to configure some aspects of how the filters used by the H.i.P. Editor's **Open...** and the H.i.P. Information Manager's **Convert Documents...** command convert a document from word-processor formats into HTML.

The sections below will display some sample lines from this configuration file, explain how they're used, and give their default values. These can also be set using the **Document Conversion Options...** command in the H.i.P. Information Manager **Tools** menu.

Headings

The following setting tells the H.i.P. Editor to look for headings in word-processor documents.

```
Support heading="YES"
```

The default value is YES, so you actually don't have to include this setting in the *htmstd.cfg* file unless you want to change it. If you don't want the H.i.P. Editor to look for headings, change 'Support heading' to NO.

Headings in tables

```
Support heading in table="NO"
```

This setting means that the H.i.P. Editor will *not* try to find headings inside a table. The default value is NO. If you want the H.i.P. Editor to look for headings in a table, change 'Support heading in table' to YES. We don't recommend this, however.

Heading length

```
Maximum heading length=40
```

This setting tells the H.i.P. Editor to treat only paragraphs in the word-processor document that have 40 characters or less as possible headings. This is to avoid interpreting ordinary lines of text as headings. The default for this setting is 40 characters. The possible values are between 5 and 32767 characters, inclusive.

Font size and font style

The H.i.P. Editor uses the font size and font style of paragraphs to identify possible headings.

Default behavior

By default, the H.i.P. Editor regards paragraphs in an emphasized (bold, italic, or bold-italic) font style as possible headings. Unless you specify otherwise, the *first* emphasized paragraph in the document whose length is less than or equal to the maximum heading length will be surrounded with the H1 element. Subsequently, any paragraphs that have the same font and font style as the first H1 will also be surrounded by an H1. Similarly, the *second* emphasized paragraph in the document whose length is less than or equal to the maximum heading length, and whose font size is different from that of any of the preceding paragraphs, will be surrounded with the H2 element. Subsequently, any paragraphs that have the same font and font style as the first H2 will also be surrounded by an H2. This pattern is followed for the other heading levels.

Specifying font size and style

The following are examples of settings that let you specify more precisely what font size and font style a paragraph in the word-processor file should have in order for the H.i.P. Editor to interpret it as a heading of a particular type.

```
Heading 1 font size="=20I"
Heading 2 font size="=18B"
Heading 3 font size="=12BI"
Heading 4 font size="10"
```

'Heading 1 font size' specifies the criteria for an H1 heading, 'Heading 2 font size' the criteria for an H2 heading, and so forth.

If you just want to specify the font size, as in the 'Heading 4' example above, then the size is the only value you have to enter. This example tells the H.i.P. Editor to surround any paragraph with an H4 element if it is in 10 point type and an emphasized style, and its length is less than or equal to the maximum heading length.

If you want to specify the font style—bold (B), italic (I), or bold-italic (BI)— in addition to the size, then you have to put an '=' sign directly before the font size (this means that there are actually two '=' signs in the line) and the appropriate abbreviation (B, I, or BI) after the font size. The 'Heading 1' example tells the H.i.P. Editor to surround a paragraph with an H1 element if it is in 20 point italic type, and its length is less than or equal to the maximum heading length. The 'Heading 2' example tells the H.i.P. Editor to surround a paragraph with an H2 element if it is in 18 point bold type, and its length is less than or equal to the maximum heading length. The 'Heading 3' example tells the H.i.P. Editor to surround a paragraph with an H3 element if it is in 12 point bold-italic type, and its length is less than or equal to the maximum heading length.

Note that if you make a precise specification, a paragraph will be assigned the heading element only if it matches the specification exactly. In the examples above, a paragraph that is in 24 point type will not be surrounded by H1, even though it is larger than some paragraphs that would be surrounded by this element.

You can specify only *even* point sizes for headings.

The following setting is equivalent to the default behavior:

```
Heading 1 font size="0"
```

Lists

The following setting tells the H.*i*.P. Editor to look for lists in word-processor documents.

```
Support list="YES"
```

The default value is YES, so you actually don't have to include this setting in the *htmstd.cfg* file unless you want to change it. If you don't want the H.*i*.P. Editor to look for lists, change 'Support list' to NO.

Alternate list characters

The H.*i*.P. Editor regards paragraphs that start with a 'bullet character' or a number as list items.

You can also specify 'alternate list characters', which are the characters that the H.*i*.P. Editor will regard as the start of a list item, in addition to the normal list bullets. For example:

```
Bullet list char="-,*,.,"
```

The value of this setting should be a list of up to 3 characters, separated by commas, with a comma at the end.

Minimum number of list items

```
Minimum list items=2
```

This setting specifies the minimum number of successive list items (whether they start with a bullet character or one of the 'alternate list characters') that the H.*i*.P. Editor must find before it will create a list. The possible values can be any number between 1 and 4; the default is 2.

Blockquotes

The following setting tells the H.*i*.P. Editor to look for blockquotes in word-processor documents.

    Support blockquote="YES"

The default value is YES, so you actually don't have to include this setting in the *htmstd.cfg* file unless you want to change it. If you don't want the H.*i*.P. Editor to look for blockquotes, change 'Support blockquote' to NO.

The H.*i*.P. Editor will surround a paragraph with a BLOCKQUOTE element if its length is greater than or equal to the minimum blockquote length, it is not in an emphasized font style, it contains no 'return' characters, and it consists of:

1. A starting quote

2. Some text

3. An end quote

4. A 'return' character (there must be no space between the end quote and the 'return' character)

The acceptable quote characters are straight double quotes from the keyboard, opening and closing double quotes, European quotes (double angle quotes), and smart quotes (Word 6 only).

Minimum length

    Minimum blockquote length=40

This setting tells the H.*i*.P. Editor to treat only paragraphs in the word-processor document that have 40 characters or more as possible blockquotes. This is to avoid interpreting a few words of quoted text as a blockquote. The default for this setting is 40 characters. The possible values are between 5 and 32767 characters, inclusive.

Image

The following setting should not be changed:

```
Picture
filename="WITH_PATH_NAME"
```

Appendix 3: File and markup formats

This appendix describes:

- [ ] The H.*i*.P. file format (the next page)
- [ ] The format for SoftQuad H.*i*.P. auxiliary files, and the markup for linking these files to H.*i*.P. documents:
  - [ ] Cascading style sheets (Views) (page 416)
  - [ ] Live tables of contents (Live TOCs) (page 417)
  - [ ] User-defined extension definitions (UDEs) (page 418)
  - [ ] Site template configuration files (page 423)
  - [ ] Topic files (page 422)
  - [ ] Annotations (page 420)
- [ ] Special markup used in SoftQuad H.*i*.P.:
  - [ ] Pop-ups (page 426)
  - [ ] One-to-many links (page 427)
  - [ ] User-defined extensions (UDEs) (page 418)
  - [ ] Topics (page 422)
  - [ ] Classes (page 428)

☐   Meta data (page 428)

The H.i.P. document format

H.i.P. documents have an *.htm* or *.html* file extension. A H.i.P. document contains the following special markup:

☐   A FRAMESET element, defining three frames, as described on the next page. The document contents must be placed inside a BODY element, inside this FRAMESET's NOFRAMES element.

☐   A JavaScript inside a SCRIPT element in the document's HEAD.

☐   The following META element inside the document's HEAD:

```
<META
NAME="SQ-HIP.ROLE" CONTENT="container">
```

☐   There must be a file called *epsilon.hpv* (page 416) in the same folder as the H.i.P. document.

The special markup in the document is delimited by comments of the form:

```
<!-- SQStart: SoftQuad H.i.P. Version x.x.xx
Section N DO NOT REMOVE -->
...
<!-- SQEnd: SoftQuad H.i.P. Version x.xx.xx
Section N DO NOT REMOVE -->
```

A H.i.P. document can contain other META and LINK elements, but these are not required in order for the document to be recognized as a H.i.P. document.

The H.i.P. JavaScript

A JavaScript and META element must be included inside the document's HEAD element. These can be found in the file *block1.hpx* in the H.i.P. folder.

The H.i.P. Frameset

A FRAMESET must follow the HEAD element. This FRAMESET can be found in the file *block2.hpx* in the H.i.P. folder. It appears where the BODY element normally goes. The document content (the BODY) must occur inside the NOFRAMES element, as shown in the outline example below.

```
<!-- SQStart: SoftQuad H.i.P. Version 1. 2. 15
Section  2 DO NOT REMOVE-->
<FRAMESET ...>
  <FRAMESET ...>
    <FRAME ...>
    <FRAME ...>
  </FRAMESET>
  <FRAME ...>
<NOFRAMES>
<!-- SQEnd: SoftQuad H.i.P. Version  1. 2. 15
Section  2 DO NOT REMOVE
--><BODY>
<p>
Your HTML here</P>
</BODY>
<!-- SQStart: SoftQuad H.i.P. Version  1. 2. 15
Section  3 DO NOT REMOVE
-->
</NOFRAMES>
</FRAMESET>
<!-- SQEnd: SoftQuad H.i.P. Version  1. 2. 15
Section  3 DO NOT REMOVE
-->
```

The 'epsilon' file

A file called *epsilon.hpv* must exist in each folder containing a H.*i*.P. document. The *epsilon.hpv* file can have arbitrary content. If this file is generated by the H.*i*.P. Information Manager, it will have the following content:

```
<META NAME="SQ-HIP.ROLE" CONTENT="helper">
Do not delete this file!
It is necessary for the proper operation of
the SoftQuad H.i.P. Viewer.
```

Cascading style sheets (Views)

A cascading style sheet has the *.css* file extension. This file must be pointed to in the H.*i*.P. document, using a LINK element. For example:

```
<LINK REL="STYLESHEET" TYPE="text/css"
    HREF="catalog.css" TITLE="catalog"
```

The REL attribute must have the value STYLESHEET. The HREF specifies the style sheet file. The TYPE attribute must specify the 'text/css' MIME type. The value of the TITLE attribute represents the style sheet in the H.*i*.P. Viewer's **Views** pop-up menu. The title should be the same as the title inside the style sheet file.

Each *.css* defines one style sheet. You can have multiple style sheets attached to your document.

The syntax for cascading style sheets is specified by the CSS standard, available at *http://www.w3.org/pub/WWW/TR/WD-css1.html*.

There is no standard way to add a title to a style sheet, so SoftQuad H.*i*.P. uses the '@' syntax:

```
@meta {title:"Your Title Here"}
```

If other meta-information is needed, it can be added to the style sheet file using a similar construction.

See also page 89 for more information on how cascading style sheets are used in SoftQuad H.*i*.P. .

Live TOCs

A Live TOC definition file consists of a title and a list of elements and/or UDEs. The file should have a *.hpl* extension. This file must be pointed to in the H.i.P. document, using a LINK element, for example:

```
<LINK REL="SQ-HIP-LTOC" HREF="tocs.hpl" TITLE="Headings">
```

The REL attribute must have the value SQ-HIP-LTOC. The HREF specifies the Live TOC definition file. The value of the TITLE attribute represents the Live TOC in the H.i.P. Viewer's **Live TOC** pop-up menu. The title should be the same as the content of the TITLE element in the Live TOC file; if you link a document to a Live TOC file using SoftQuad H.i.P., the LINK element is generated automatically and and its TITLE attribute value is obtained from the Live TOC file.

Each *.hpl* file defines one Live TOC. You can have multiple Live TOCs attached to your document.

A Live TOC file is an SGML file conforming to the following DTD:

```
<!ELEMENT LIVETOC - - (TITLE, UDEFILE*, TOCELEMENT+)>
<!ATTLIST LIVETOC
VERSION CDATA #REQUIRED>
<!ELEMENT TITLE  - - (#PCDATA)>
<!ELEMENT UDEFILE - - (#PCDATA)>
<!ELEMENT TOCELEMENT - - (#PCDATA)>
```

For example:

```
<LIVETOC VERSION="1"><TITLE>Headings</TITLE>
<UDEFILE>catalog.hpe</UDEFILE>
<TOCELEMENT>H1</TOCELEMENT>
<TOCELEMENT>SectTitle</TOCELEMENT>
</LIVETOC>
```

If you want to add a UDE to your Live TOC, you must specify the UDE (*.hpe*) file in the UDEFILE element. This Live TOC file defines a Live TOC, called 'Headings', that contains one regular HTML element, H1, and one UDE, **SectTitle**.

See also page 85 for more information on how live tables of contents are used in SoftQuad H.i.P.

User-defined extensions

User-defined extensions (UDEs) are implemented using the CLASS attribute of various elements. The UDE name must start with a letter, and can consist only of letters, digits, and '-' (dash). Note that if you use a '-' in the UDE name, style sheets that refer to this UDE won't work in Microsoft Internet Explorer.

Any HTML element can be used as the 'base' element for a UDE, though there may be practical limitations.

A UDE can be based on only one HTML base element, i.e. you can't have:

```
<P CLASS="PARTNO">
```

and:

```
<EM
CLASS="PARTNO">
```

defined in the same document or document type, although you can use those two UDEs in different documents.

In order to be recognized by the various SoftQuad H.i.P. components, UDEs must be stored in a file with a *.hpe* extension, and pointed to in the H.i.P. document using a LINK element:

```
<LINK REL="SQ-HIP-UDE" HREF="catalog.hpe" TITLE="Catalog">
```

The REL attribute must have the value SQ-HIP-UDE. The HREF specifies the UDE definition file. The value of the TITLE attribute in LINK should be the same as the content of the TITLE element in the UDE file. If you link a document to a UDE file using SoftQuad H.i.P., the LINK element is generated automatically and and its TITLE attribute value is obtained from the UDE file.

Only one UDE file can be attached to a document at a time.

A UDE file is an SGML document conforming to the following DTD:

```
<!ELEMENT EXTENSIONS - - (TITLE, UDE+)>
<!ATTLIST EXTENSIONS VERSION CDATA #    REQUIRED>
<!ELEMENT TITLE   - - (#PCDATA)>
<!ELEMENT UDE    - - (UDENAME, HTMLNAME, DESC)>
<!ELEMENT UDENAME - - (#PCDATA)>
<!ELEMENT HTMLNAME - - (#PCDATA)>
<!ELEMENT DESC    - - (#PCDATA)>
```

This sample UDE file defines two UDEs, **ProdName** and **PartNo**, which are based on the STRONG and EM elements, respectively.

```
<EXTENSIONS VERSION="1">
<TITLE>Catalog</TITLE>

<UDE>
<UDENAME>ProdName</UDENAME>
<HTMLNAME>STRONG</HTMLNAME>
<DESC>Product Name</DESC></UDE>

<UDE>
<UDENAME>PartNo</UDENAME>
<HTMLNAME>EM</HTMLNAME>
<DESC>Part Number</DESC></UDE>

</EXTENSIONS>
```

A UDE named ExtName is represented in a H.i.P. document by an element whose CLASS attribute has the value EXTNAME. The UDES defined in the example above will be represented in a H.i.P. document by the following markup:

```
<STRONG CLASS="PRODNAME">...</STRONG>
<EM CLASS="PARTNO">...</EM>
```

> **Note** We recommend that UDEs be given mixed-case names to distinguish them from ordinary HTML elements. SoftQuad H.i.P. does not enforce this convention, however.

See also the section *Classes* (page 428).

See page 79 for more information on how UDES are used in SoftQuad H.i.P..

Annotations

All annotations made by one person that apply to a specific document are stored in a single annotation file. This file can be loaded using the H.i.P. Viewer or merged into the related H.i.P. document using the H.i.P. Editor.

Annotation files

Annotation files are SGML files whose DTD is a subset of the HTML DTD. The annotation file has the following special features:

- A LINK element whose REL attribute has the value PARENT, REV attribute has the value ANNOTATIONS, and whose HREF attribute points to the H.i.P. document that this file annotates.

- A META element whose NAME attribute has the value AUTHOR, and whose CONTENT attribute value consists of the user ID of the person who made the annotations.

- A META element whose NAME attribute has the value ANNOTATIONFILE, and whose CONTENT attribute has the value '1.0'.

- Two META elements whose NAME attributes have the values DOC.SQ-HIP.DOC-CHECKSUM and DOC.SQ-HIP.TAG-CHECKSUM, and whose CONTENT attribute value is a checksum.

- When you save annotations, all of the elements in the HEAD element of the H.i.P. file being annotated are also saved in the HEAD element annotation file. These will be checked against the H.i.P. file if you later attempt to merge the annotations with a H.i.P. file.

- Each annotation consists of a P element (inside BODY) whose CLASS attribute has the value ANNOTATION. The first sub-element of this P element is an A element whose HREF attribute contains the URL to the element pointed to by the navigator. This URL consists of the folder path containing the annotated document, to which a 'named location' (the part of the URL after a '#') is appended. This named location is of the form 'sq$n$', where n is an integer, and indicates that the annotation is attached to the nth element in the BODY. This numbering scheme will not be synchronized with the H.i.P. document if the document is changed before the annotation file is merged with it.

Annotations in a H.i.P. document

When an annotation file is merged into a H.i.P. document in the H.i.P. Editor, the annotations are represented as DIV or SPAN elements, with the CLASS attribute set to ANNOTATION. A SPAN will be generated if the annotation is inline; a DIV if the annotation occurs somewhere that a block-style element is required. All annotations are displayed as UDEs called Annotation.

> **Technical note** This breaks the rule that a UDE cannot be based on more than one base element. We regard this as acceptable, because the definition of the 'Annotation' element is pre-defined in the H.i.P. Editor. Users should not define their own 'Annotation' UDE, and any they do define will be ignored.

Merging annotations

Successfully merging annotations with the corresponding H.i.P. document depends on the H.i.P. document having few or no changes (particularly markup changes) after the annotations were saved in the H.i.P. Viewer.

When an annotation file is saved, two checksums are taken and written into META elements in the annotation file. These checksums are based on designated elements: those elements inside the the BODY of the H.i.P. document that is being annotated, with the exception of TBODY, COLDEFS, COLDEF, and ROWS.

- A 'tag' checksum based on the designated element names is taken; this is written into the CONTENT attribute of a META element whose NAME attribute is DOC.SQ-HIP.TAG-CHECKSUM.

- A 'document' checksum based on the content of the designated elements is taken; this is written into the CONTENT attribute of a META element whose NAME attribute is DOC.SQ-HIP.DOC-CHECKSUM.

When you try to merge an annotation file into a H.i.P. document, using the **Merge Annotations...** command in the H.i.P. Editor **Edit** menu, the H.i.P. Editor generates these checksums again. Changes to the H.i.P. document affect the checksums in the following ways:

☐ Adding or deleting one of the designated elements changes the 'tag' checksum.

☐ Adding or deleting text (except whitespace) in one of the designated elements changes the 'document' checksum.

- ☐ Any changes to a non-designated element do not change the check-sums.
- ☐ Editing attribute values does not change the checksums.
- ☐ Adding or deleting whitespace (spaces, tabs, new lines) does not change the checksums.

The operation of merging the annotations at the correct location in the H.i.P. document is based entirely on the *tag count*: when each annotation was created, its URL was given a named location (such as 'sq36') based on the position of the element that was annotated. When the annotations are merged, an annotation with the location 'sq36' will be merged with the 36th element in the BODY of the document. If the document hasn't changed, the annotation will be merged in the correct location.

The H.i.P. Editor compares the old and new checksums so that it can tell whether the document has changed and warn you about the probability of a correct merge. If the 'document' checksum has changed, the merge may still be correct if the document structure hasn't changed. If the 'tag' checksum has changed, there is a high probability that some annotations will not be merged correctly. In these situations, the H.i.P. Editor will display the document properties (that is, the contents of the SoftQuad H.i.P.-specific META elements) in both the annotation file and the H.i.P. document, to help you determine whether you are trying to merge the appropriate annotation file.

Topics

Topics in a H.i.P. document are contained in META elements such as the following:

```
<META NAME="SQ-HIP.TOPIC"
    CONTENT="shoelaces, Australia">
```

The NAME attribute of the META must have the value SQ-HIP.TOPIC; the CONTENT attribute contains the text of the topic.

You can also maintain topic (*.hpo*) files that a SoftQuad H.i.P. user can load and choose topics from. Topic files contain a title and one or more topics; these files are SGML files conforming to the following DTD:

```
<!ELEMENT TOPICLIST - - (TITLE, TOPIC+)>
<!ATTLIST TOPICLIST
VERSION CDATA #REQUIRED>
```

```
<!ELEMENT TITLE  - - (#PCDATA)>
<!ELEMENT TOPIC  - - (#PCDATA)>
```

For example:

```
<TOPICLIST VERSION="1">
<TITLE>Various Unrelated Topics</TITLE>
<TOPIC>Canada</TOPIC>
<TOPIC>Shoelaces</TOPIC>
<TOPIC>Wine</TOPIC>
<TOPIC>SGML</TOPIC>
</TOPICLIST>
```

Site template configuration

The file *sitetmpl.hpt* configures the wizard that is launched when the New Project... command in the Information Manager is chosen. This wizard offers several project template choices, and possibly sub-choices, displays descriptive text and images for each choice, and lets you choose a target folder in which to copy the files that constitute the that template project you choose.

Each template can consist of several files and subfolders, and can include documents, images, helper files, etc.

The *sitetmpl.hpt* file is an SGML file conforming to the following DTD:

```
<!ELEMENT BODY - - (CAT_INFO)+>
<!ELEMENT CAT_INFO  - - (CAT_INFO)*>
<!ATTLIST CAT_INFO
SHORT    CDATA #REQUIRED
LONG     CDATA #REQUIRED
DIR      CDATA #IMPLIED
HOMEPAGE CDATA #REQUIRED
IMG      CDATA #REQUIRED >
```

An element called BODY surrounds the contents of the file. Each CAT_INFO element that is directly nested inside BODY adds one project template category to the Categories section of the template wizard's initial dialog box.

The attributes of CAT_INFO are interpreted as follows:

- SHORT: the template category label that appears in the **Categories** list in the template wizard dialog.
- LONG: the long description of the template category in the template wizard dialog. The description can contain line breaks and blank lines.
- DIR: the folder where the files that constitute this template are kept. If you open the template, all of the files in this folder (and its subfolders) will be copied to the destination folder.
- HOMEPAGE: the 'index page' or starting point for the template files. This page is used as the index page when the Information Manager builds a project based on the chosen template.
- IMG: an image representing the template, displayed on the right side of the template wizard dialog box.

The **DIR**, **HOMEPAGE**, and **IMG** can be specified with absolute or relative paths, but not URLs. A relative path for **DIR** or **IMG** is relative to the SoftQuad H.*i*.P. folder; a relative path for **HOMEPAGE** is relative to the **DIR** location.

Each template category can have an arbitrary number of levels of sub-categories. To give a category one or more sub-categories:

- Nest one or more CAT_INFO elements inside the CAT_INFO element corresponding to the current category.
- Delete the DIR attribute value in the current category's CAT_INFO element.

Sub-categories are displayed by choosing a category and then clicking on the [Next>>] button in the initial dialog box. If a template category has no sub-categories (that is, the corresponding CAT_INFO has no nested CAT_INFOs), clicking on [Next>>] displays a dialog for choosing the destination folder, into which the chosen template and its auxiliary files will be copied.

Here is a sample specification that defines one category with three subcategories.

```
<BODY>
<CAT_INFO SHORT="Sample Projects and Templates"
LONG="Collections of H.i.P. documents designed to be used as
templates in creating a corporate intranet."
```

```
IMG="template\core\filelist.bmp">

<CAT_INFO SHORT="Corporate Pages"
LONG="Corporate homepage and other company-wide documents."
DIR="template\core\"
HOMEPAGE="index.htm"
IMG="template\core\corp.bmp">
</CAT_INFO>

<CAT_INFO SHORT="Sample HR Department"
LONG="HR Homepage and associated projects. Includes
workgroup pages plus HR department documents."
DIR="template\humanres\"
HOMEPAGE="index.htm"
IMG="template\core\hr.bmp" homePage="index.htm">
</CAT_INFO>

<CAT_INFO SHORT="Sample Finance Department"
LONG="Finance Homepage and associated projects.  Includes
workgroup pages plus Finance department documents."
DIR="template\account\"
HOMEPAGE="index.htm"
IMG="template\core\account.bmp">
</CAT_INFO>

</CAT_INFO>
</BODY>
```

Popups

There are two types of popups:

☐ *Inline* popups are implemented as a UDEs called InlinePopup. This UDE is based on the SUP (superscript) element and has a CLASS attribute value of INLINEPOPUP. While an inline popup can contain inline elements such as B, I, EM, these elements are ignored when the H.i.P. Viewer formats the popup.

☐ *Block* popups are implemented as a UDE called BlockPopup. This UDE is based on the DIV element and has a CLASS attribute value of BLOCKPOPUP. Block popups can contain the same elements that DIV can; that is, almost everything in an HTML document.

These UDE definitions are built into SoftQuad H.i.P.; they don't have to be made explicitly in a UDE file linked to a document.

There are two ways to specify the image that the H.i.P. Viewer uses to represent a block popup.

To specify a default block popup image for the whole document, insert a LINK element in the HEAD of the document. The REL attribute of this element must have the value SQ-HIP.BLOCKPOPUP; the HREF attribute must specify the filename or URL of the popup image.

For example:

```
<LINK REL="SQ-HIP.BLOCKPOPUP" HREF="moon.gif">
```

To specify a image for use with a particular block popup, insert an IMG element inside the BlockPopup element. The CLASS attribute of this element must have the value BLOCKPOPUP; the SRC attribute must specify the filename or URL of the popup image. For example:

```
<IMG CLASS="BLOCKPOPUP" HREF="sun.gif">
```

One-to-many links

One-to-many links (also called 'multilocs') are represented in a H.*i*.P. file by a MENU element whose CLASS attribute has the value MULTILOC. A one-to-many link is represented in the H.*i*.P. Editor by a UDE called Multiloc, and in the H.*i*.P. Viewer by a pop-up menu of links.

Each LI can represent a link, a fly-out sub-menu of links, or a menu separator, depending on its content.

☐ To represent a link, the LI should contain an A element, and nothing else. The text contained inside the A will be displayed as the label of an item in the pop-up menu in theH.*i*.P. Viewer. Choosing that item will cause the H.*i*.P. Viewer to load the URL contained in the A's HREF attribute. (Any text that is not inside the A element will be ignored by the H.*i*.P. Viewer.)

☐ To represent a fly-out sub-menu, the LI should contain:

– Some text, which will be used as a menu item label. This text must not be surrounded by an A element.

– A nested Multiloc (MENU) element. The items in the nested multiloc will appear in the fly-out menu.

☐ To represent a menu separator, the LI should contain text only (which will be ignored) or be blank.

Classes

Classes are similar to UDEs, but are more general. Classes do not have to be defined explicitly; a class consists all of the elements in a document whose CLASS attribute has a particular value. For example, you could specify all of the 'advanced' content in a document by assigning the CLASS attribute value ADVANCED to the element instances that contain that content. In this case you could refer informally to the 'Advanced' class, but this name has no special meaning within SoftQuad H.i.P. .

Cascading style sheets can be used to assign formatting properties to all of the members of a class.

Meta data

SoftQuad H.i.P. uses several types of 'meta data', represented in H.i.P. documents by META elements . The information in a META element is contained in the NAME attribute, which specifies what kind of data is represented, and the CONTENT attribute, which contains the data. There are three types of meta data: general, effective dates, and custom. All of these can be set from the Document Properties dialog.

General meta data

With the exception of topics, all of these can be specified in the General section of the Document Properties dialog. The H.i.P. Monitor can maintain distribution lists based on the author and topics. The other values are for informational purposes only.

Meaning (CONTENT)	NAME
Description	SQ-HIP.DESCRIPTION
Author	SQ-HIP.AUTHOR
Company	SQ-HIP.COMPANY
Creation date (YYMMDD HH:MM)	SQ-HIP.CREATED
Last modification date (YYMMDD HH:MM)	SQ-HIP.LAST-MODIFIED
Topic (see page 422)	SQ-HIP.TOPIC

Effective dates

The H.i.P. Monitor can use the publish date, publish to URL, and expiry date to publish or remove pages. The comments are used in the e-mail that the H.i.P. Monitor issues to inform users of the status of a page. All of these values can be set in the **Effective Dates** section of the **Document Properties** dialog.

Meaning (CONTENT)	NAME
Publish Date	SQ-HIP.PUBLISH-DATE
Publish Comment	SQ-HIP.PUBLISH-COMMENT
Publish To URL	SQ-HIP.PUBLISH-TO-FILE
Expiry Date	SQ-HIP.EXPIRES-DATE
Expiry Comment	SQ-HIP.EXPIRES-COMMENT

Custom meta data

Custom meta data is user- and application-specific data that SoftQuad H.*i*.P. lets you insert in a document, but does not use in any other way. This kind of data is represented by a META element with NAME and CONTENT values of your choice. (SoftQuad H.*i*.P.-specific meta data use NAME attribute values starting with 'SQ-HIP; it is best to avoid this for custom meta data). For example:

```
<META NAME="SECURITY" CONTENT="2">
```

Custom meta data can be set in the Properties section of the Document Properties dialog.

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